VOLUME 2 • SEPTEMBER 1947 • NUMBER 9

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Journal of the AMERICAN MEDICAL WOMEN'S ASSOCIATION

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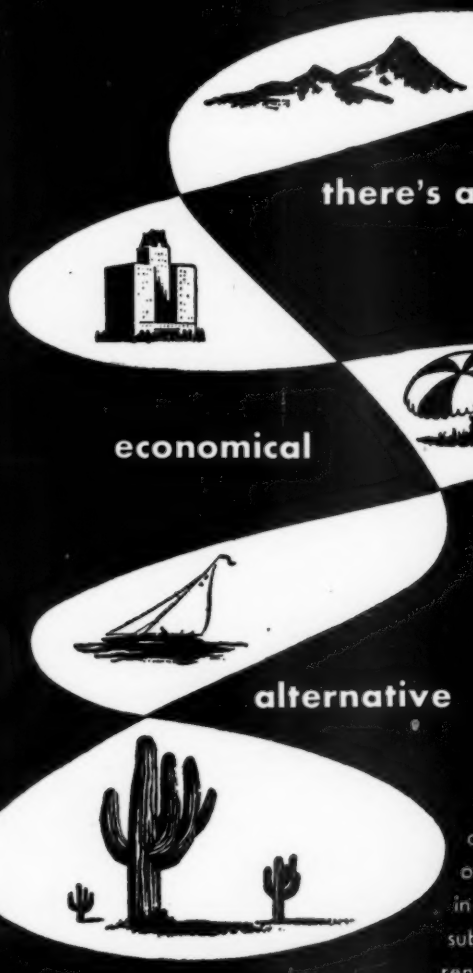

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VOLUME 2 SEPTEMBER 1947 NUMBER 9

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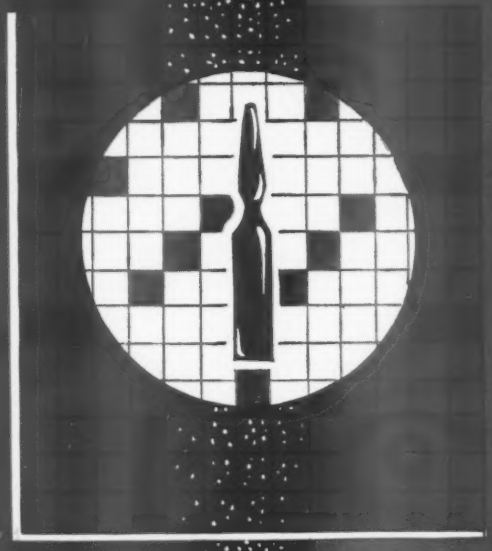

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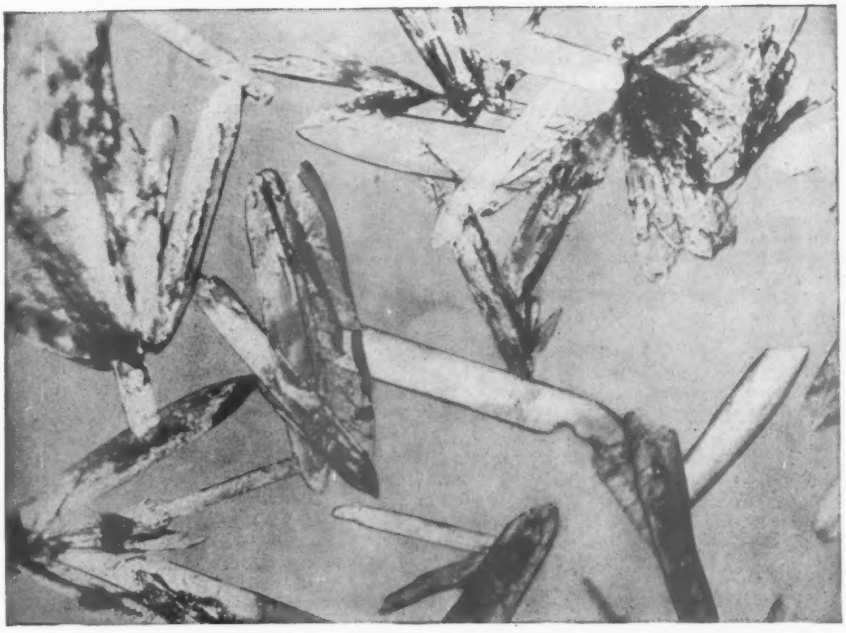

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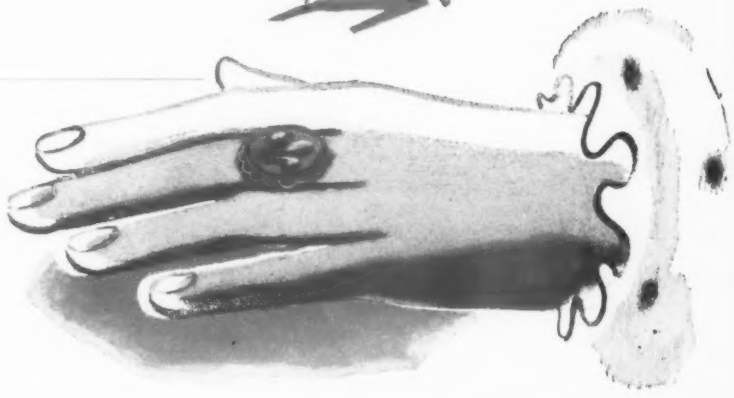

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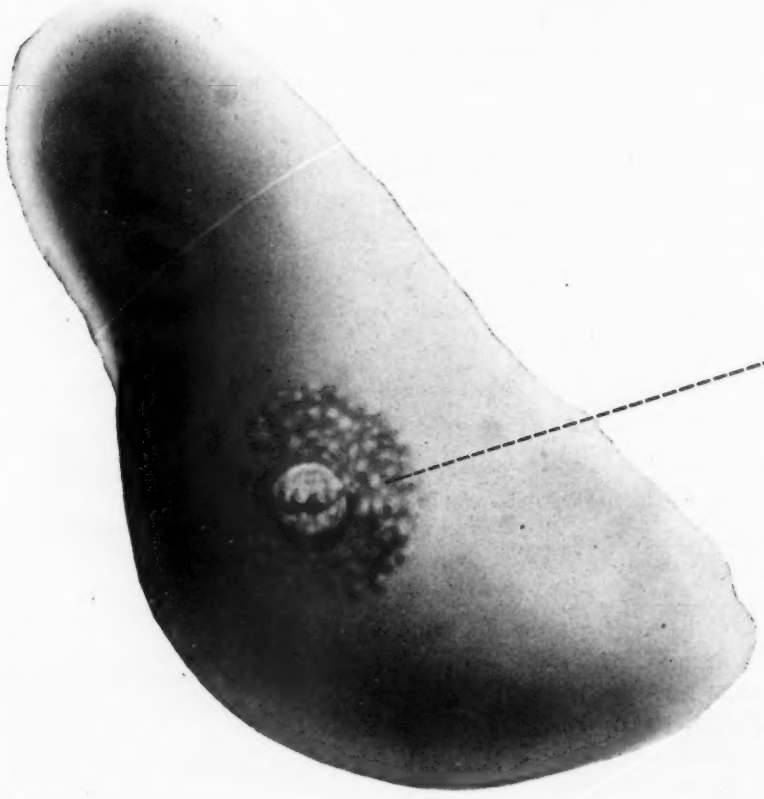

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1) Brougher, J. C.: Prevention and Treatment of Postpartum Fissured Nipples with Local Applications of Vitamin A and D Ointment, West. J. Surg., Obst. & Gynec., 52:520, 1944.

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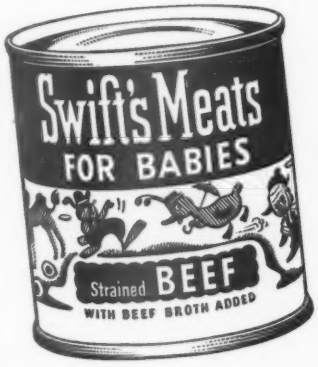

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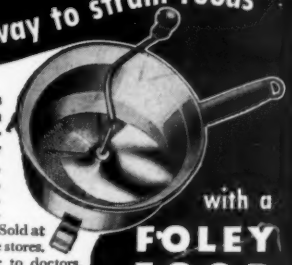

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1. Barnes, J.: Brit. M. J., *1*:79 (Jan.) 1944.
2. Sikkema, S. H. and Sevringhaus, E. L.: Am. J. Med., *2*:251 (March) 1947.
3. Finkler, R. S. and Becker, S.: J. A. M. W. A., *1*:152 (Aug.) 1946.
4. Finkler, R. S. and Becker, S.: Am. J. Obst. & Gynec., *53*:513 (March) 1947.
5. Rakoff, A. E., et al: Clinical Evaluation of Dienestrol, A Synthetic Estrogen, Presented at Meeting of Assn. for Study of Int. Secretions, Atlantic City, N. J., June 6-7, 1947.
6. Gordon, E. S.: Value of Dienestrol in the Menopausal Syndrome (Tentative Title) to be published.

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Dr. Morris recently completed a service of fifteen years as Professor of Preventive Medicine at the Woman's Medical College of Pennsylvania, and previously was Associate Professor of Clinical Medicine at the Medical College of the University of Wisconsin.

Safeguarding the Undergraduate and Graduate Student of Medicine against Tuberculosis*

SARAH I. MORRIS, M.D.

MANY erroneous theories have been promulgated for tuberculosis, accepted as facts, and used as therapeutic criteria for years, although often based on inadequate scientific evidence, which have had to be abandoned under scientific scrutiny, new and better means of examining, and better technical skill.

Out of these changes, the most important development of the present era is not the wonderful skill of the surgeon who prolongs life in the advanced case, but the economic and technical developments which are bringing within reach of the common man the means for "early diagnosis and early treatment," and reawakening interest in tuberculosis among the general profession.

The public has been made tuberculosis-conscious by the mass x-ray surveys, both in the armed forces and, recently, in civilian groups, which have been made possible by the development of photofluoroscopy and the miniature film, resulting in many more cases being referred to the medical profession for professional care.

The weakest link in these surveys, however, is the lack of careful follow-up. The original x-ray will seldom disclose the actual nature of the abnormal findings, the extent of disease, or the activity of the tuberculous lesion; neither does the miniature film disclose the *clinical* character of the disease.

Although early diagnosis of tuberculosis is essentially a clinical problem, many physicians have neglected the field of tuberculosis, since the development of sanitaria and the consequent dearth of available clinical material in general hospitals has resulted, till very lately, in inadequate teaching of tuberculosis.

With the return of the infected service man and the reference of cases from the nation-wide surveys, however, services in this field will be increasingly in demand. Refresher courses, therefore, for the general practitioner, and education of the people in their need for co-operation in follow-up studies are necessary; else these potentially valuable surveys will prove a boomerang.

Criteria may change, but one fact remains unaltered and unalterable: *we cannot have tuberculosis without the tubercle bacillus.* Where the tubercle bacillus is found most frequently and most concentrated, there the hazard of disease is greatest.

Opportunities for gross exposure are greatest in those who serve the public: those who care for the sick, minister to the poor, and serve the underprivileged in crowded quarters. Only recently, however, has responsibility been accepted by medical schools and hospitals for the potential hazard existing for young adult medical students, who at their most vulnerable age are intimately exposed, in line of duty, to tuberculous patients and materials.

In nursing and medical schools more rapid infection with tuberculosis takes place than in comparable age groups in any other walk of life. It has been demonstrated, by routine tuberculin testing, that the majority of students have become allergized before graduation, ample evidence of a continuing infective environment. The peak of infection occurs in the preclinical years before scheduled contact with clinic or hospital patients (in our experience in the second half of the second year) when live tubercle bacilli can be encountered in routine duties only, in laboratory and autopsy room and in the use of tuberculous cases for physical diagnosis.

Direct handling of fresh tuberculous specimens and actual participation of students in the autopsy examinations constitute direct intimate contact-haz-

*An abridgement of a paper presented June 7, 1947, before the Academy of Tuberculosis Physicians. The complete paper, which is a further discussion of Dr. Morris' studies, reorted in the Am. Rev. Tuberc., 54-2: 140-157, Aug., 1946, will soon appear in **Tuberculology**, the official organ of the Academy.

ards. The role of the autopsy room in infecting students has been repeatedly demonstrated. Careful technique in handling infective material and instruments, careful collection, sterilization, and redistribution of protective gowns and gloves, discontinuance of student direct participation in the autopsy examination, and less time per capita spent in the autopsy room, have, when inaugurated, definitely resulted in a striking reduction in the number of cases of progressive disease.

The responsibility for protecting against hazards of exposure at this point is that of the hospital authorities.

In the use of tuberculous cases for physical diagnosis, as rigid a technique is necessary as for any other highly communicable air-borne disease, including protective gowns and masks. Objection to the latter on the basis of the possible depressing psychic effect on the patient is no more tenable than in scarlet fever, while the salutary effect of having a patient note the careful application of a protective technique by demonstrators and students is definitely educational.

Tuberculous disease also follows more quickly in medical school environment in recently converted reactors. In our own study, 58 per cent developed progressive disease within six months after conversion, 32 per cent within the first year, 5 per cent within one and a half years, and only 5 per cent in two years or longer. A few instances have been recorded where an accidental exposure of a class soon after conversion has resulted in a spectacular series of cases, suggesting a heightened susceptibility after allergizing; with rapidly fulminating disease and with some early deaths, suggesting an overwhelming of the body defense mechanisms.

Most medical schools have not used the tuberculin reaction as a guide in curriculum assignments, but it serves as an excellent guide for avoiding early re-exposures and resulting disease, by more careful case and section assignments. In nursing schools the tuberculin test is much more frequently used as a guide and the incidence of disease has been thereby definitely reduced.

Routine early x-ray follow-up after conversion is of special importance, both to secure the first evidence of disease for treatment, and to avoid progressive disease from early re-exposure. Annual or infrequent x-rays may miss the minimal stage as cases may develop between roentgenograms. A routine x-ray at six month intervals should make possible a diagnosis at a correctable stage.

The initial x-ray lesion, however, is rarely an accurate enough criterion on which to base treatment and prognosis. A short period of observation for study is justified for the symptomless minimal case or one satisfactorily stabilizing if kept under close observation. The very slight minimal lesion may clear, a seemingly minimal lesion may prove to be a prephthisical edema which clears spontaneously, or a fibrotic or exudative-fibrotic closed case may stabilize while ambulatory, without danger to others; but this limited time of very close observation should be immediately terminated at the first sign of progressing disease. The environment of a medical school or hospital is too hazardous, the curriculum too full and rigid, and the disease too unpredictable, to adjust to the needs of an unstabilized case of tuberculosis for any length of time.

At present, confusion also exists in the interpretation of evidence of infection and early disease, because of grave doubt thrown on some time-honored criteria by recent studies. No longer can we consider calcified hilar lymph nodes specific evidence of a "healed primary complex," even with a positive tuberculin test; nor does a negative tuberculin response, without calcification, necessarily mean no previous infection, nor, with calcification, complete immunity; while recent conversion to positivity means heightened susceptibility.

At Henry Phipps' Institute at Philadelphia, tuberculin reactors reverting to negativity while under observation, showed much less reversion in those whose original tuberculin reaction was marked; only 0.4 per cent of those with 3+ reactions reverted, while 70 per cent of 1+ reactors became negative. Neither the dosage nor the time relation between allergy and disease have been given sufficient attention. In our own series, the markedly sensitive reactors were usually those who were known to have been recently exposed or massively exposed earlier. Whether or not a given conversion to positivity follows an initial exposure, it is a *current* invasion and sensitivity, and, until stabilized, a hazard.

Many more persons are reaching young adulthood still tuberculin negative, hence we may assume that many have never before been infected. When these are converted and disease supervenes, they do not typically run the mild course of the "childhood type" with hilar lymph gland involvement, but usually follow the course of the "reinfection" type with the initial infiltration in the parenchyma.

Young service men who were initially infected in the highly tubercularized areas abroad have shown their first evidence of disease as a pleurisy with effusion in many cases. Dr. Esmond Long

warns us that this may prove to be the characteristic initial lesion in these young male adults.

In the female adult, in our own series, pleural irritation was reported, as a pleurodynia, very close to tuberculin conversion, and in those who developed parenchymal disease, seven developed pleurisy with effusion also.

We may need to change our concept of a specific primary and a characteristic re-infection type, and alter our nomenclature to signify types based on such factors as age, dosage, time of allergy, heightened sensitivity, early re-exposure, etc. Certainly we can no longer give a favorable prognosis for primary disease in the young adult, whatever the original onset.

The minimal lesion has been discounted too frequently, especially by the symptomless medical student loathe to interrupt study, or by a well meaning faculty member anxious to help a student maintain scholastic status, or by family physician or consulting phthsiologist, accustomed to more advanced cases, relying on later corrective measures.

With contact with known and unknown cases in hospital clinics and wards, hazards increase, not only for the undergraduate, but for the graduate intern and resident, the nurse, house-service personnel, and patients. This is retroactive also, since any of these, when infected, threaten the non-tuberculous patient.

On leaving college, if their cases are minimal or uncomplicated, students often delay sanitarium treatment till complications present a much graver prognosis. The importance of complete bed-rest *in early cases* to avoid complications, and as an adjunct to other treatment, is often forgotten since the development of collapse therapy.

Students and graduates on being dismissed from sanitaria for ambulatory care at home also often return to medical school and hospital work too early, which not infrequently leads to relapse on resumption of duties. In our twenty-nine returning students, 45 per cent relapsed, and chains of student-to-student contact were traced from these relapsing patients through several student generations and into internship.

When there is a lack of appreciation of the gravity of early tuberculous disease in the young adult in the infective environment of medical school and hospital, or undue confidence is placed in ambulatory care, delay in diagnosis and treatment will surely result. When withdrawal of diseased students is delayed, disease progression, with spread to fellow-students and patients, may be expected; and when unstabilized tuberculous students are allowed to return, relapse is likely to occur, with spread to others.

An effective control program, therefore, should follow a fairly rigid plan, under direction of one medical officer, with an expert advisory committee, and with hearty co-operation of college faculty and management; else procrastination is inevitable.

The control program should be extended to the post-graduate years and, effectively, should include, as a minimum, a screening by entrance x-ray examination, repeated at routine intervals, with tuberculin re-testing of any who may have left college still negative. Also essential is a rigid regime for protection while caring for tuberculous patients and on autopsy service, and prompt and thorough study of minimal cases, with arrangements for early treatment at the first evidence of progressing disease. Otherwise we may expect that some will be overwhelmed by the additional opportunities for exposure and the more arduous duties and confined life of hospital training, and may be lost to the profession.

This hazard will be an increasing one, unless some means is adopted to combat it, as tuberculous cases are coming into general hospitals in increasing numbers, and all general hospitals are being urged to develop tuberculosis departments. Clinics have already been established for ambulatory care of cases from sanitaria, or other sources, for follow-up pneumothorax re-fills, or other treatment.

With more tuberculous patients referred for collapse therapy and surgical treatment, and the need for co-operation with the Veterans Bureau, close contact with the big city general hospitals is desirable. The distance to sanitaria and transportation costs favor delay in securing admission, and encourage leaving the sanitaria against advice too soon. Granted that more training of the young physician in this field is important, in our zeal to spread knowledge of the disease, steps should be adopted to prevent spread of the tubercle bacillus, which simultaneously robs us of our young physicians while training.

Among the "sixteen million people who are admitted to general hospitals every year," many unsuspected cases of tuberculosis enter and leave undiagnosed. Hospital authorities have been aware for some time of this hazard, but the economic obstacles for its correction were, till very lately, insurmountable. Now the hospital is in a strategic position to contribute to the control of tuberculosis while removing the hidden active case. An x-ray screening at entrance could separate them at once from others for study or treatment, and free more sanitarium beds for the chronically ill. The x-ray will also reveal non-tuberculous chest conditions, otherwise overlooked, to be placed under early treatment, among them carcinoma.

X-ray screening at hospital entrance is urged by the United States Public Health Service and the National Tuberculosis Association, the latter recommending allocation of some of the Christmas-seal funds to aid small communities to secure necessary equipment. This screening should include the examination of nurses and medical personnel for graduate training, as a requisite for appointment, and all hospitals not providing such protection should lose their status as training institutions.

The bovine strain, BCG, has already been accepted for vaccination in France, Scandinavia, and Russia, where the health authorities have already begun nation-wide immunization; and Great Britain may soon begin a similar project. At a conference last fall in Washington, attended by representatives of many interested groups and institutions, including Denmark and China, with the United States Public Health Service, it was decided that although BCG offered great hope, there were too many variables and lack of standardization, as yet, to warrant considering it as entirely past the experimental stage.

Its still variable and somewhat short lived immunity will make necessary, in medical schools, a carefully regulated regime of vaccination and re-vaccination, and repeated tuberculin re-testing, to determine the amount of protection in a given case, and to guarantee immunity at times of greatest exposure. To make certain that no early disease is overlooked, x-ray screening must be continued. No diminution in the protective programs just getting under way in medical schools and hospitals, therefore, will be advisable for some time to come.

Streptomycin holds out some hope of slowing up the disease till the overwhelmed defense mechanisms of the body, in the very severe case, can become adjusted and their function somewhat restored. It should be of most value in the early case overwhelmed by massive or rapidly repeated doses, but, so far, the danger of its developing bacterial resistance has hampered its use in the early minimal case.

Conclusions

The following conclusions may be drawn in relation to tuberculosis and its control in medical students, undergraduate and graduate, to date:

Hazards still exist in medical schools and hospitals for development of tuberculosis, in line of duty.

While eventual protection against infection with human tuberculosis by use of BCG strain presents some hope, more studies are necessary and standardization of material and techniques are essential for its effective use in so hazardous an environment.

Streptomycin may be very helpful in the selected rapidly fulminating case.

For some time to come, a well organized and rigidly operated tuberculosis control program, based on protection from exposure in medical schools and hospitals, is essential.

These measures should be augmented by a case-finding program by x-ray survey of all hospital personnel and all ambulatory and bed patients.

By these means, infection by tuberculosis of the young medical student, in line of duty through avoidable exposure, may be minimized, and progress to advanced disease or death avoided.

It is urged, therefore, as the next step in securing such protection, that every organization interested in control of tuberculosis (by resolution and influence of its members) use every effort to secure, as the minimum, x-ray screening as a requisite at entrance for all medical students, to be routinely repeated thereafter; all intern, resident, and technical staff-members in hospitals, for appointment; all house-service personnel, for employment; and all patients, for any hospital service. Employees are already eligible, in many States. for remuneration under the Workmen's Compensation Laws, for tuberculosis acquired "in line of duty."

Summary

The present hazards for development of tuberculosis still confronting undergraduate and graduate students of medicine are reviewed.

Various aspects of exposure, infection, sensitization, disease, progression, early care and treatment are briefly discussed.

Changing criteria and new concepts of approach to diagnosis and treatment altering prognosis are enumerated.

BCG vaccination as to present and future prospects is considered, and the possible role of streptomycin in delaying disease progress is mentioned.

Aims and methods for an effective control program are presented.

Responsibility for present conditions and their correction is placed on medical school and hospital authorities as an economic and efficiency measure.

The legal status of responsibility, through Compensation Laws in some States, is noted.

Dr. Morgan is Professor of Public Health Education in the School of Public Health of the University of North Carolina.

Qualifications for Health Educators

LUCY S. MORGAN, Ph.D.

THE HEALTH EDUCATOR is relatively a newcomer to the fields of health and education for it has been only during the present decade that the professional status of such personnel has become firmly established.

While Health Education in its innumerable forms has been in process of development ever since man first became concerned over his own health and talked about it to someone else, the term health education originated less than thirty years ago and its acceptance as a professional specialty in the public health program is even more recent. Commenting on this an editorial in the June 1947 issue of the journal of the American Public Health Association, entitled "What is Health Education," states:

"Health Education is the newest of the professional specialties to be developed as a basic and essential element in the public health program. In the 19th century, the physician and the nurse came into the picture. Today, our Committee on Professional Education has prepared detailed statements of educational qualifications of thirteen specialists with more to come. In none of the areas of service has development been more rapid than in that of health education. Ten years ago there were perhaps a dozen recognized experts of this kind in the United States. Today the accepted minimum standards for local health service list the health educator along with the administrator, the nurse, the sanitarian, the statistician, and the laboratory expert as a fundamental element in every program."[1]

A review of the history of the health education movement in the United States reveals that there has been considerable confusion in the field. Definitions have been more or less influenced by the prevailing concepts in the two fields concerned: health and education.

To some, health education has meant classroom instruction in matters of health; others have thought of it as medical inspection of school children or sanitary inspections of the environment; still others have visualized it as physical education or big muscle activity. Some have seen it as a visit from the public health nurse or the personal health guidance of the physician or health counsellor, others have thought of it entirely as propaganda and publicity about some specific disease or phase of health; and still others have encompassed the entire school or community health program in their interpretation of the term. Individual definitions have varied from the specific to the all-inclusive. However, at the present time there is considerable agreement among authorities in the field that health education includes all of the areas listed above and more. This agreement is evidenced in the definitions recorded in a symposium on "What Is Health Education" in a recent issue of the American Journal of Public Health[2].

The acceptance of health education as an important field of service in public health and education has resulted in an increased demand for trained personnel. World War II served to accelerate the interest in this field and Health Officers, School Administrators, and Directors of Voluntary Agencies have been equally insistent in their requests for well-qualified health educators. However, at the present time the demand for this type of personnel far exceeds the supply.

Prior to 1943, the whole question of qualifications for health educators was determined more or less by the schools that offered training. In that year two significant reports were published which clearly defined the functions in health education and listed the qualifications of the health educator. One of these reports was prepared by the Committee on Professional Education of the American Public Health Association[3] and the other by a Special National Committee on Educational Qualifications of Health Educators appointed by the U. S. Commissioner of Education[4]. The first report is concerned with the educational qualifications of *all* health educators while the second

places primary emphasis on the qualifications of school health educators.

A third report soon to be published delineates the functions of the College Health Educator and lists the qualifications for this special group of professional workers. This report will be included in the Proceedings of the Third National Conference on Health in Colleges.

There is general agreement in all of these reports that there are certain basic training requirements essential for all health educators. These include thorough undergraduate preparation in the basic sciences, education, and the social sciences. In addition to these basic requirements, there are certain specific requirements that are needed by the public health educator, the school health educator, and the college health educator which should be obtained in graduate study.

After making a careful job analysis of existing positions in health education, the Committee on Professional Education of the American Public Health Association agreed upon twelve functions in this field. Briefly the health educator's responsibilities are listed below.[3]

To assist in planning and carrying out a program of health education appropriate to the area, after surveying its needs and resources.

To assist in community organization to recognize and solve health problems.

To promote coordination of all agencies contributing to health education.

To give aid in the health education aspects of both pre-service and in-service training of personnel in health agencies, schools, or other agencies.

To assist with the initiation, organization, and guidance of study programs of various groups.

To contribute to the improved quality of health education of the school child in co-operation with school personnel. This includes aid in planning the school health program and health instruction, conferences with personnel, and any special activity desired by the school.

To conduct an informational service in order to answer inquiries concerning health.

To prepare, assemble, and distribute health education tools and materials appropriate to the area.

To conduct a speakers' bureau, conferences, meetings, and radio programs.

To provide for constant evaluation of the health education program and understanding its activities.

The functions in health education listed above served to determine the special qualifications necessary for the professional public health educator. Seven areas of knowledge were then outlined which should produce competence in health education. The first four areas describe what may be called a well-rounded college experience while the last three are concerned chiefly with professional education. The major headings are given here.[3]

1. Basic cultural education, including the development of appreciations and skills in the use of the English language.

2. Basic science education, including physics, chemistry, biology, anatomy, physiology, and bacteriology.

3. Training in education and educational psychology to provide a knowledge of and functional experiences with:
   a. The nature of the learning process.
   b. The principles and products of education.
   c. Methods and possibilities of adult education.
   d. The nature of the school health program.
   e. Methods of educational evaluation.
   f. Curricula and curriculum development in public schools and institutions of higher education.
   g. Educational supervision and administration.
   h. Organizing and conducting field training for students at pre-science level.

4. Social science education to provide an appreciation of the importance of respect for the human personality and a knowledge of racial, social, and cultural characteristics of the people and their mores, and the significance of the economic status of population groups.

5. Education in the field of hygiene and public health to provide a knowledge of
   a. Physiologic hygiene, including personal hygiene, nutrition, and mental hygiene.
   b. Environmental sanitation.
   c. Basic principles in the organization and administration of public health.
   d. Methods of communicable disease control, including the nature of the causative organisms and methods of transmission.
   e. Public health statistics and principles of statistical reliability.
   f. Survey methods.
   g. Relative importance of health problems and mode of attack.

6. Training in the area of public administration to provide a knowledge of
   a. Governmental and community organization.
   b. Community agencies, their functions, aims, and interests.
   c. Techniques for the successful interview and consultation conference.
   d. The qualities of leadership, how to discover leaders, and how to work with them.
   e. Group work methods.
   f. Principles of planning.

7. Training in special skills required in health education.

The report further states that "carefully planned and supervised field experience and 'internship' should be regarded as an important element in the training of the health educator and in the development of skill and ability in the field of health education."

When Selective Service turned a searchlight on the poor health of American youth, school authorities were stimulated to find ways of improving school health programs. The need for reorganization of the existing health programs and for well-trained health teachers or health coordinators for the secondary level and better training in health for teachers on the elementary level became apparent. Physical fitness programs were advocated for all schools. But the shortage of personnel for school health was as acute as it was for public health with the result that few schools were able to add the health educators needed.

With the demand for trained school health educators came a need for determining what the functions and qualifications for such personnel were. Suggestions for the preparation of school health educators were given in the report of the National Committee on Educational Qualifications of Educators[4]. This report states:

"The individual who is to teach secondary school health education courses requires specific preparation for this work . . . In addition to desirable personal qualities, a broad cultural background, and preparation in general educational principles and methods, the health teacher should have a knowledge of:

(1) the functions, structure, and nutrition of the body.
(2) common deviations from normal structure, function, and nutrition.
(3) elements of disease prevention and control.
(4) environmental factors affecting health.
(5) economic factors influencing health.

As an aid to meeting these qualifications, the health educator should include in his program of studies such courses as chemistry, biology, anatomy, physiology, and bacteriology. These should be supplemented by special work in nutrition, mental hygiene, personal hygiene, community hygiene including the basic principles of public health organization, the school health program, safety and first aid, techniques for individual health guidance, disease prevention, and methods and materials in health education."

Academic qualifications alone will produce neither good public health educators nor school health educators for there are certain personal attributes that are equally important. These include such characteristics as flexibility, tolerance, creative ability, good personal health, sound judgment, reliability, determination, stick-to-it-iveness, common sense, and adaptability. Formal courses of instruction do not guarantee such important characteristics as those listed above or the ability to size up and meet situations or the ability to get along with people.

In the field of health education for colleges and universities developments have been steady. Historically the earliest form was physical education. Next, perhaps, came the incorporation into the curriculum of prescribed courses in personal hygiene. These were later expanded to include environmental and community hygiene. Today most colleges provide some form of medical service for all students under the direction of a well-qualified physician who may also serve as a member of the faculty, as head of an infirmary, and as a consultant in matters relating to the health of students.

A successful health education program in a college or university is seen to consist of three important aspects: health service, health instruction, and healthful living. Health service provider not only for medical and nursing care but for guidance and counselling as well. Health instruction is built upon the needs of all students and a healthful environment is provided to meet the highest possible standards of living.

Where a health educator is employed in a college or university, his chief function is to synchronize efforts toward achieving the above objectives and to utilize available resources in so doing, in co-operation with other faculty members and administrators. Necessarily, health education programs in colleges vary in many respects, as do the institutions themselves. No program can be blueprinted to suit simultaneously the needs of a small liberal arts college, a large university, and a teacher-training institution giving instruction to future teachers of health.

In general, however, certain functions are appropriate for the college health educator in his task of planning a program of health education suited to the needs and resources of the institution. He serves as a member or as a chairman of the college health council, which exists to find and solve health problems, and to formulate and implement health policies of the institution. He assists in promoting a program of health instruction for all students, and in planning the curriculum, and in teaching courses in personal and community hygiene and related subjects. In a teacher-training institution, he may be expected to teach courses in school health education. He assists in the health education aspects of the medical service. He aids in the promotion and maintenance of a healthful college environment. He assists in the in-service health education training of faculty and administrators. He maintains a co-operative relationship with community agencies which contribute to health education. He maintains a supply of health education tools and materials. Finally, he aids in evaluating the college health education program.

The educational qualifications of a college or university health educator may be determined by the degree of educational and administrative responsibility delegated to him. He should be able to present preparation and experience commensurate with those of other faculty members at the institution by which he is employed. For positions of advanced responsibility it is well for the health educator to hold the degree of M.D. with special training in education, social science, and public health, or a doctorate in Science, Philosophy, or Education. For any position, training and experience covering the learning process, administration and supervision in education, guidance and counselling, and a thorough foundation in the basic sciences, including bacteriology, genetics, eugenics, and embryology, are desirable in addition to the professional training as a health educator.

Successful experience in teaching and in community work should also have been demonstrated.

The tremendous need for well-qualified health educators was shown in a report which was presented in 1946 to the Health Education Section of the American Public Health Association by the Section Committee on Post-War Planning in Health Education[5]. In this report it was stated that between 8,000 and 10,000 trained health educators are needed to staff programs in the United States. Of this number approximately 5,000 are needed in public health and 4,000 in educational agencies. The report also pointed out that at the present time while approximately 460 individuals are listed under the title of health educator only 65 per cent of these persons really qualify as trained according to the standards set up by the Committee on Professional Education.

Up to the present time there have been several factors which have prevented Schools of Public Health from being able to meet the almost overwhelming demand for training health educators. The first and most significant of these is the lack of undergraduate curricula which adequately prepare individuals for graduate study in this field. This has meant that few people who apply for admission to Schools of Public Health have the prerequisites needed for entrance. However, in a few years the situation should be improved as several institutions began undergraduate programs for health education in 1947, and many such programs are in the process of being established.

A second factor which has limited the number eligible for enrollment for the Master of Public Health degree with a major in health education is an "experience clause" set up by the American Public Health Association's Committee on Accreditation for Schools of Public Health. Since the health educator is a relatively new type of personnel and recommendations emphasize the need for employing trained workers, the probability of finding many applicants for professional school training who are already experienced in this field is slight. Complete requirements for accreditation have not yet been definitely defined and it is hoped that some way out of the dilemma will be found so that the growth of this new field will not suffer.

A third factor which has served to retard the training of health educators has been an apparent lack of interest on the part of professional schools in the health education field, with the result that adequate training is often not available. All of these factors are disturbing but not alarming, since every new specialty in public health has gone through similar stages of development.

In summary, health education has made rapid strides during the past few years. Qualifications for employment and pre-requisites for professional training have been established on the basis of careful studies, and curricula are constantly being revised in an attempt to develop the best possible personnel to fill a new-found need. More important, wise leadership has seen to it that criteria remain flexible and are periodically changed to fit the requirements of a growing program. As standards are raised even higher, as leaders in health and education become increasingly familiar with the functions of the health educator, and as more adequate methods are discovered for selecting well-qualified applicants for training, this type of worker will be even more in demand than at the present time and the field of health education will attain the bright future which recent developments have forecast.

Bibliography

[1]What is Health Education?: Editorial. Am. J. Pub. Health. 37, 744, (June) 1947.

[2]What is Health Education? A Symposium prepared at the request of the Editorial Board of the American Journal of Public Health: Am. J. Pub. Health. 37, 641-652, (June) 1947.

[3]Educational Qualifications of Health Educators: Committee on Professional Education, American Public Health Association. 1943.

[4]Preparation of Teachers for the Program of Physical Fitness through Health Education: National Committee on Educational Qualifications for Health Educators, Education for Victory, U. S. Office of Education. Vol 1, No. 32, (June 15) 1943.

[5]American Public Health Association, Health Education Section, Report of Committee on Post-War Planning in Health Education, mimeographed, unpublished, 1946.

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Tropical Medicine

Part XIII—The Helminthes (continued)

CARROLL LaFLEUR BIRCH, M.D.

Ascariasis

Ascaris lumbricoides is the largest of the intestinal round worms. The female measures about 20 to 35 cm. by 3 to 6 mm., the male roughly 15 to 30 cm. The pale yellow or pinkish cuticulum is finely striated. The vulva of the female is located mid-ventrally. The ova are bile stained, dark brown, mammillated, and unembryonated, and measure from 45 to 75 micra. They are highly resistant and require 7 to 10 days outside the body before becoming infective.

The mature ova are swallowed by man in contaminated food or water. In the small intestine the eggs hatch into vigorous larvae which measure from 0.2 to 0.3 mm. They penetrate the wall of the gut to reach the venules or lymphatics and are transported to the right heart by way of the vena cava. From the right heart they are carried to the lung. Here they break through the walls of the capillaries into the air sacs. From the air sacs they ascend the respiratory tree, bronchioles, bronchi, trachea, over the epiglottis, down the esophagus, through the stomach, to the intestine where they develop into adult males and females. They live and mate in the jejunum. One female may pass 200,000 eggs daily for 125 days or 25,000,000 eggs. Some adults may live for a year.

The life cycle from egg to egg requires 60 to 75 days. There is no intermediate host.

Hogs, rats, cats, dogs, leopards, and other animals harbor ascarides which probably are species specific. A few instances have been reported of human infection with animal ascarides.

Ascariasis has a world wide distribution. It is more common in the tropics, especially in unsanitated regions. In some endemic areas 85 per cent of the population are infected. In certain sections of southeastern United States from 30 to 40 per cent of the children carry ascarides. It is largely a dooryard and household infection.

Symptoms vary from mild to grave. In the lung migrating larvae may produce lobular pneumonitis with cough, fever, and bloody sputum containing larvae. This sometimes is called ascaris pneumonia. Lung symptoms occur 6 to 7 days after ingestion of the eggs. Eosinophilia is usual and there may be a rash. Some of the larvae may pass through the capillaries of the lung and go through the left heart into the systemic circulation to the brain, spinal cord, kidney, or other organs. The symptoms will depend upon the organs involved.

Adult worms may pass in the stool or be vomited from the stomach. They may be present even at the nasal orifice. In large numbers they sometimes mass together and produce mechanical blockage of the intestine. A worm may invade the appendix or the bile duct producing jaundice. Rarely ascarides are found in abscess of the liver or lung. Allergic reactions, urticaria, pruritis, edema, or asthma, are not uncommon. Occasionally a worm may perforate the gut and cause peritonitis.

The diagnosis is made by finding the ova or worms in the stool.

Treatment. Caprokol (hexylresorcinol crystoids) is the drug of choice because it is efficient and is nontoxic. Caprokol is manufactured in hard gelatin coated crystoids of 0.1 gm. and 0.2 gm.

Procedure. A saline cathartic is given the night before. The drug is given on an empty stomach; the dose for adults is 1 g., for children from 1 to 5 years, 0.6 g.; from 6 to 10 years, 0.8 g. No food is allowed for five hours; then the saline purge is repeated.

Warning.: The tablets must not be chewed because caprokol irritates the mucous membrane. Antagonistic drugs, such as tetrachlorethylene, may cause ascarides to go wild with disastrous results. Worms may migrate to the stomach and be vomited, or regurgitated and locate in the eustachian tube, or block the bile passages, or penetrate the bowel, or enter the appendix. If hookworm and Ascaris infections exist together the Ascaris should be got rid of first, or both can be treated by giving a saline cathartic the night before, and in the morning administering 2.7 cc. tetrachlorethylene with 0.3 cc. oil of chenopodium. Two hours later a saline purge should follow.

Prevention is the most important measure in eradicating ascariasis from an infected area. The following steps will aid in prevention:

1. Treat all known cases.
2. Make a survey to locate the symptom free

carriers. **Treat them.**

3. Turn the soil deeply where children play especially in the shaded damp areas.

4. Construct fly-proof water-tight privies and instruct the people in their use.

5. Sterilize drinking water.

6. Do not eat uncooked foods unless it is known that they come from a clean source.

7. Wash hands and clean fingernails before eating.

8. Teach the mothers and the children good habits of sanitation. This can be done in school or by the public health nurse.

Hookworm Infection

Ancylostoma duodenale and Necator americanus are the common hookworms of man. Reference is made to these parasites in the earliest of historical records. They were called "little worms of little people". In 1838 Dubini recovered the worms at a postmortem examination and named them Ancylostoma duodenale. The life cycle was worked out by Looss in Egypt at the end of the 19th Century. In 1899 Colonel Ashburt discovered that hookworm infection was the cause of tropical anemia. In 1900 Dr. Allen Smith of Texas identified a new species of hookworm which he named Necator americanus, the American murderer. In 1910 Dr. Faria found a third species in Brazil which he named Ancylostoma braziliense. This type infests dogs, cats, and their wild relatives and is the cause of creeping eruption in man.

Hookworm infection is wide spread throughout tropical and subtropical regions. N. americanus, the New World hookworm, is found in southern United States, Mexico, and Central and South America. It is present in Africa, India, China, all of the countries of southeast Asia, northern Australia, and most of the Pacific islands. Ancylostoma duodenale, or Old World hookworm, is found around the Mediterranean Sea in parts of India, China, Southeast Asia, Japan, many of the islands of the south Pacific, and a few isolated regions of South America.

Morphology. The female of A. duodenale is 12 mm. long, the male about 10 mm. N. americanus is a little smaller, the female, 10 mm., the male, 8 mm. Adults have a tough yellowish or pinkish cuticula. The buccal cavity of the Old World worm is provided with two pairs of fused teeth which are used for attachment and for piercing the mucous membrane. The oral capsule of N. americanus is provided with cutting plates in place of teeth. The caudal end of the male is expanded into fleshy rays to form a copulatory bursa. Each bursa is provided with two copulatory spicules, in N. americanus these spicules are fused at their tips while in A. duodenale they diverge. The vulva of the female is ventral at the junction of the middle and posterior thirds of the body. During fertilization the copulatory bursa of the male embraces the female in the region of the vulva. There are many morphological differentiations which characterize the several species of hookworms.

Life Cycle. Adult worms live in the upper small intestine of man attached to the mucosa. Both males and females suck blood. After fertilization the female passes eggs into the intestinal lumen which are carried down by the fecal stream. The ova are broadly oval and measure from 55 to 75 by 35 to 40 micra. Ova usually are in the 2, 4, or 8 cell stage. When the feces are dropped in warm, moist shady places the ova hatch into rhabditiform larvae in a day or two. These larvae measure 250 to 300 micra. They feed, grow rapidly, molt several times, and then become filariform or infective larvae. This is a non-eating stage. When the filariform larvae come in contact with human skin, usually of the feet, they penetrate actively and enter the blood stream. They are carried through the right heart to the lung, break through to the air sacs, ascend the respiratory tree, and pass over the epiglottis, down the esophagus, through the stomach to the intestine. During this long passage they have grown and become adults. Using the cutting apparatus of the buccal capsule they break through the mucous lining of the upper small intestine and suck a portion of the mucosa into the oral cavity, as a baby takes a nipple. Contractions of the muscular esophagus produce a pumping action which keeps the blood flowing. It has been estimated that a single worm may extract as much as 0.8 cc. of blood in twenty-four hours. If the worm burden is heavy the blood loss is great.

Epidemiology. Hookworm infection is maintained by the unsanitary habits of the people in countries where the climate and rainfall favor the development of the worms. Bare feet greatly increase the incidence of the disease. The use of human excreta as fertilizer serves to spread the infection. In the tropics, coffee and banana groves and fields of sugar cane are ideal breeding places. Many persons infected with hookworm show no symptoms. Carriers help to spread the parasites. The highest incidence of hookworm infection and hookworm disease occurs in children and teenagers. Dr. Heiser called hookworm infection the

most prevalent disease in the world. He estimated that one out of every three persons carried the worm. Dr. Lambert, in "Yankee Doctor in Paradise", gave a colorful picture of the ravages of hookworm on some of the tropical islands. His lecture to the natives on "Unhooking the Hookworm" is a memorable piece of literature.

The symptoms of hookworm disease follow the route of the worm through the body. At the site of penetration, usually on the feet, a dermatitis often develops which is called ground or dew itch. The eruption may be papular, vesicular, or erythematous. Unless the lesions become secondarily infected they subside in about two weeks. As the larvae migrate through the lung, they may produce a pneumonitis similar to but less severe than that seen in Ascaris infection.

Adult worms in the upper small intestine suck blood and produce an enzyme which destroys tissue by lysis. Constant loss of blood produces a microcytic hypochromic anemia, accompanied by weakness, pallor, edema, and physical and mental retardation. Eosinophilia is usual. There is diarrhea, abdominal distress, anorexia, nausea, and vomiting. Children show abdominal distention, pot belly, edema, or even anasarca,

Diagnosis is made by finding the ova in the stool.

Treatment. Prevention involves the same procedures as for ascariasis plus the wearing of shoes and the protection of all skin surfaces from infected soil.

Warning: If hookworm infection coexists with ascariasis, the Ascaris should first be eliminated by administration of caprakol.

The drug of choice in uncomplicated hookworm infection is tetrachlorethylene. Each capsule contains 15 minims. The dose for adults is 3 cc. for children, 3 minims per year of age.

Procedure. Saline purge (sodium sulfate) is given the night before. In the morning, on an empty stomach, the total dosage of tetrachlorethylene (3 cc.) is given at once. Patient must remain in bed. Two hours later the saline purge is repeated. After copious evacuation of the bowel, the patient may have a light breakfast.

Warning: Tetrachlorethylene should not be given in the presence of lung, liver, or kidney disease, during pregnancy, to the insane, or in the presence of ascariasis. If any of these complications exist, caprokol which is less efficient for hookworm but is also less toxic should be used.

Strongyloidiasis

This infection is caused by a round worm, Strongyloides stercoralis. The slender female is about 2.5 mm. long. She resides in the mucosa of the upper small intestine. As she threads her way through the mucosa she lays embryonated eggs which closely resemble those of hookworm. The rhabditoid larvae hatch in the mucosa and make their way to the lumen of the bowel and are carried on by the fecal mass If the larvae discharged in the feces meet favorable conditions of temperature and moisture they develop into free living males and females which mate and reproduce. This independent existence may continue for some time but if conditions become unfavorable filariform or infective larvae are produced. These enter the skin of man, taking the same route as the hookworm.

Strongyloidiasis differs from the hookworm infection in that it may build up within the body. After defecation in persons with unclean habits the rhabditoid larvae in the fecal material about the anus may be transformed into the filariform larvae and enter the skin of the perineum. If the individual is constipated the filariform larvae may develop in the colon and penetrate the mucosa of the gut, reach a blood vessel, and take the usual heart, lung route to the intestine. In these ways a mild infection may build up to a severe one even if the individual has left the endemic area.

Symptoms are similar to those of hookworm, but free blood in the stool is rare.

Hookworm disease and strongyloidiasis can be differentiated in the following ways:

1. In hookworm infection examination of the stool reveals the characteristic ova while the feces in strongyloidiasis contain the active larvae.
2. The rhabditoid larvae of Strongyloides has a short preesophagus, while that of hookworm is long.
3. The filariform larva of Strongyloides has a bifid tail, while that of hookworm is pointed.
4. The parasitic adults of Strongyloides seldom are seen.

Treatment. Gentian violet is the drug of choice in infection with a Strongyloides stercoralis. Seal-Ins coated medicinal gentian violet tablets of 0.5 grain each are manufactured. The dose for adults and children is 1 grain (2 tablets) three times daily before meals for sixteen days. Toxic symptoms are epigastric pain, nausea, and violet colored urine. If these symptoms appear, the drug should be discontinued for a few days. It may be necessary to repeat this course of treatment several times. Underclothing and bed clothes often are stained a deep blue.

(*To be Continued*)

RECENT ADVANCES IN THERAPY

In this issue of the JOURNAL *a new series of monthly Reviews makes its appearance. No attempt will be made to give fine points of technical knowledge, which can be obtained from the original sources, but it is thought that a comprehensive review of the literature in specific fields will add stimulus and interest to the* JOURNAL. *The scope will be wide; the reviewers competent in their specialties and representative of a wide cross-section of our membership. While each of us may not be interested in surgery of the heart or the intricacies of psychoanalytic theory, it is obvious that our patients are. And since it is impossible for an individual doctor to cover all fields, even superficially, it adds to our general interest and medical culture to be aware of what is going on in the large domain of modern medicine.*

The Editors are grateful to those who will participate in this series and are appreciative of the critical judgment and sound thought implicit in each Review.

DOROTHY WELLS ATKINSON, M.D.
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A Review of New Developments in the Treatment of Hodgkin's Disease

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A REVIEW OF THE literature on the therapy of Hodgkin's disease does not encourage very optimistic expectations. However, there seems to be some progress with a new chemical method which is beneficial not so much regarding final outcome of the disease as in making life more tolerable during regressions. In view of recent experiments, it seems timely to review and evaluate the various methods of treatment that have been used.

Unfortunately, not much information has been gained about the nature of the disease since Hodgkin described the picture in 1832. We still are not sure whether we are dealing with an infectious or a neoplastic process. For a time tuberculosis was thought to be the etiological agent. Some have claimed that there is a relationship among Bacillus melitensis Bacillus suis, and Hodgkin's disease. The Gordon test is supposed to prove that the disease is an infectious process. This test consists of the production of an encephalitis by the intracerebral injection of lymphogranulomatous material into the brain of a rabbit. However, it has been proven that any other eosinophilic tissue would produce the same picture.

The more modern view is in favor of a neoplastic process involving cervical, axillary, inguinal, mediastinal, mesenteric, and retroperitoneal lymph glands, with enlargement of the liver and the spleen. The disease is found more frequently in males. It does not show any geographical predilection.

The clinical picture presents emaciation, fever of Pel Ebstein type, pruritus, pigmentation, and further, those symptoms which develop due to the site of involvement as, for instance, in bones. (Bone involvement occurs in about 24 per cent of the diseased.) Laboratory findings show a rather typical blood picture with eosinophilia, monocytosis, and lymphocytosis. The histological picture shows hyperplasia of lymph cells with active proliferation of the germinal centers of the lymph follicles with increased vascularity. The lymph sinuses are dilated, the reticulo-endothelial system shows proliferation, and the most significant feature is the presence of the typical giant cells described by Sternberg and Dorothy Reed.

The duration of life after onset is considered to be about two or three years. Lately, however, there have been authenticated reports of longer

periods, extending up to fifteen years.

Treatment of this inevitably fatal disease was originally limited to general principles such as good nourishment, rest, fresh air, arsenic, iron, liver injections, and, in more recent years, blood transfusions.

Surgery: Early surgery was suggested, and one publication by Slaughter and Craver[1] in 1942 shows favorable results with this method in a review of 265 cases. However, it would seem that the only value of surgery would be in those rare cases in which the disease process is limited to just one group of lymph nodes or in an occasional case with very early diagnosis where the process has progressed no farther than one group of lymph nodes.

Bacterial Vaccine: Treatment with bacterial vaccine and antiserum, as suggested by the supporters of the infectious theory, did not show any promising results.

X-ray: X-ray treatment of Hodgkin's disease proved of great value for many years. Innumerable reports have been published on this subject. Craver[2] not only considers x-ray treatment valuable in the life-prolonging process, but also recommends it highly against the distressing symptoms of pruritus. Bone metastases also responded well to x-ray treatment.

Ovid Meyer[3] in 1941 described three very interesting cases treated with x-ray. He, as well as Craver and many others, suggests the method of small frequent doses. One of his patients underwent treatment during pregnancy, had a normal delivery, and had a subsequent delivery a few years later. She succumbed after a decade's duration of her disease. The second patient, a boy of 14 years, had Hodgkin's disease from the age of 7 years. Due to intra- and extramedulla involvement, he developed a paralysis of his legs. Treated with x-ray he responded so well that he experienced a complete regression of his paralysis. The third patient, a female of 40 years, showed regression of all her lymph nodes after radiation and was, at the time of publication of the article, practically healed.

These three cases not only show the beneficial effects of x-ray, but also illustrate that the method of small frequent dosages applied in the proper way did not prevent the normal development of ovarian activity and did not inhibit the normal growth of a seven year old child.

A very enlightening article published by Desjardin[4] in 1945 explained the success of radiation treatment on the basis of different sensitivity to x-rays. Most sensitive are lymphoid cells and leucocytes, followed in order by epithelial cells, endothelial cells, connective tissue, bone, muscle, and nerve cells. The more active and younger the cells, the more susceptible they are to x-ray, depending upon their cell origin and age. Desjardin recommends small frequent dosages and exposure in 2 to 4 anterior fields in correspondence to 2 to 4 posterior fields. His suggestion is based on the fact that four beams in a field would reach more structures and penetrate to deeper portions of the involved organ.

Small frequent dosages, the so-called fractional method, offer the largest total dose. This idea originates from animal experiments by Regaud. Other authors, like Wood and his co-workers, stopped growth of an epithelial tumor in animal experiments by total x-ray dosage of five to eight times the limit of any tolerance to any skin area. The fractional method imitates these procedures by applying the largest total dose. Patients with chest involvement respond best as they rarely suffer from radiation sickness. Desjardin states that by proper treatment the shrinkage of the nodes ranges from 30 per cent up to 100 per cent, unless one is dealing with: (1) a terminal stage, (2) association with tuberculosis, (3) glands with a great amount of connective tissue. Careful observation of the hematopoietic system is indicated. He reports life spans of generally three to six years: in chronic cases with proper treatment some have even survived ten years.

Radium: Radium treatment of Hodgkin's disease has not fulfilled the hopes for cure either. The extreme application would probably lead to healing; however, it is questionable whether the individual would be able to stand the treatment. One article by Rollin Stevens[5] in 1942 reports a very remarkable case of cure. The case was under observation for eighteen years without recurrence. The patient was 36 years old at the time of diagnosis in 1924. He was treated with x-ray, did not respond, and was subsequently treated by injection of radioactive salt. From January of 1925 until November of 1930 he received 20 micrograms of radium chloride intravenously, as often as progressive symptoms of the disease arose. During this time he experienced symptoms which were considered at the time to be involvement of the jaw and vertebra by lymphogranuloma and were later properly diagnosed as radium necrosis. He owes his life to the fact that he was overtreated with radium. He recovered after discontinuation of the radium therapy and was subsequently treated with calcium to accelerate the elimination of the radium.

Radio-active Phosphorus: Radioactivity can be artificially induced in various elements. These offer the same chemical properties as their inactive isotopes and at the same time emit rays like radium. Thomas Fitz-Hugh and Philip J Hodes[6] in 1942 reported five cases of Hodgkin's disease treated with radioactive phosphorus. They obtained their supply from the University of California Cyclotron Laboratory at Berkeley. The atomic weight of the ordinary phosphorus is changed from 31 to 32. Its stable nuclear structure is disrupted and it is transformed into a radioactive atom. However, only one part in a million is charged with radioactivity. The resulting material is an aqueous solution of dibasic sodium phosphate and contains all properties of ordinary phosphorus with additional radioactivity. P 32 is quickly excreted, 50 per cent of its radioactive substances being excreted during the first six days. Six weeks after a single treatment, no radiation is present. P32 emits beta rays only. (Radium emits gamma rays.) P32 is handled like P31 by the animal organism. Its distribution is not equal, and it is mostly deposited in bone marrow. Other organs of predilection are the liver and the spleen. This is the reaction of the normal animal organism. Tumor tissue has a very high percentage of deposition, and rapidity of growth is proportional to the uptake of P32.

The material can be used orally or parenterally. The oral dosage, 1 to 20 microcuries mixed with orange juice, is swallowed before breakfast. Laxatives are excluded for twenty-four hours before and after use. The usual intravenous single dose is 0.2 to 2.00 microcuries. The frequency of administration varies in individual cases from one to three times weekly. Of the five cases with Hodgkin's disease treated by Fitz-Hugh and Hodes only one showed remarkable improvement for a few months. This patient proved to be x-ray therapy-fast before treatment with P32. Fitz-Hugh and Hodes consider P32 at least equal in benefit to radiation therapy, in spite of poor results. In addition, there is the advantage of easy administration and absence of radiation sickness.

Low Beer, Lawrence, and Stone[7] in an article published in 1942 state that they prefer the intravenous use of P32. They claim the following advantages: (1) No interference with digestion, (2) higher uptake of radioactive phosphorus, and (3) more accurate dosage. They recommend the method of frequent small dosages and explain the better result on the basis of the following facts: (1) The cells show different radiosensitivity at different stages of mitosis. The more frequent the treatment, the more often mitotic stages are reached. (2) The total amount is higher in frequent small dosages. (3) The utilization of phosphorus depends on metabolic need, which is highest at the mitotic stage. (4) The body is unable to use more phosphorus than its daily requirements. (5) The patient with depressed erythrocytic activity suffers further depression by large doses. The authors are disappointed in their results with the use of P32. They treated nineteen patients and had temporary favorable results only in early cases with mild manifestations of the disease.

Hoster and Doan[8] also report unsatisfactory results. Their eleven cases treated with P32 showed no improvement. One even responded well to x-ray treatment after the course of radioactive phosphorus.

Reports of serious damage to the hematopoietic system by P32 have been published by Hempelmann, Reinhard, Carl Moore, Bierbaum, and Sherwood Moore.[9] They report thrombocytopenia, leucopenia, and anemia. It was not unusual to find all three complications in the same individual. Low Beer and his associates are experimenting with a combination of P32 and x-ray in which the lymph nodes are treated locally with x-ray and P32 is given intravenously once weekly, but they have not published their results as yet.

Mustard Gas: Few reports are available so far on the use of mustard gas in the treatment of Hodgkin's disease because most of the publications were handled as "confidential material" during the war, acording to Gilman and Philipps.[10] Mustard gas was developed in the first World War. Its vesicant action was due mainly to the intracellular release of hydrochloric acid. Brief reports on its effect on the hematopoietic system, on the gastro-intestinal tract, and on the change of electrolyte fluid balance were published. Reports on its effect on the growth of experimental tumors came out at a much later date. Today it is known that mustard gas (bis beta chlorethylsulfide) and its nitrogen analogues have the same properties with regard to cytotoxic action on tissue, especially on proliferative tissue. It works, in all probability, by inactivation of enzymes in vivo as well as in vitro. It inhibits the oxygen consumption and glycolysis. Many experiments have been done in isolated tissue to prove this assumption. Mustard gas inhibits mitosis and leads to nuclear fragmentation. So far, Hodgkin's disease has responded best to

treatment with mustard gas, in comparison with other neoplastic diseases. There are, however, many undesirable effects connected with its use, for example, depression of the hematopoietic system—lymphopenia, granulocytopenia, and anemia—and disturbances of the gastro-intestinal tract—vomiting, diarrhea, and hemorrhages. In cases where large doses were administered, kidney damage due to electrolyte imbalance and loss of intracellular potassium have been reported. Extreme dosages can produce shock and disturbance of the central nervous system with resulting convulsions, salivation, miosis, and progressive muscular paralysis.

It is used therapeutically in the form of the hydrochloride salt which is water soluble and dissolves readily for intravenous use. The beneficial effects of mustard gas therapy are in the regression of lymphadenopathy, splenomegaly, and hepatomegaly. The patient has a feeling of well being, with cessation of fever and gain in weight. The regressions are only temporary, however, and repetition of therapy is necessary after weeks or months.

Rhoads,[11] Chairman of the Committee on Tumor Growth of the National Research Council, reports on the use of mustard gas on 160 patients with neoplastic diseases. All results are in the process of publication. He recommends for therapeutic use methyl bis (betachlorethyl) amine hydrochloride, as this compound damages tissues less should accidental escape of fluid occur during intravenous injection. The dosage is fixed at 0.1 gm. per kilogram intravenously on four successive days. Again, Rhoads warns of the toxic effects, sometimes exceeding the therapeutic value, as mentioned before in reviewing the article of Gilman and Philipps. Rhoads emphasizes the disappearance of fever and the feeling of well being which the patient experiences in the course of the treatment. Bone and skin lesions respond poorly. Recently these findings were confirmed by an editorial in the *Journal of the American Medical Association* (July, 1946), written under the auspices of the Chemical Warfare Service.

Experiments with other chemical agents are in progress at present, for instance, heptylaldehyde, as reported by Singher, Abels, Craver, and Rhoads.[12] So far, no therapeutic results have been achieved.

In concluding, it is evident that as yet no cure for Hodgkin's disease has been found. However, the use of mustard gas raises some optimism insofar as it makes life more pleasant for the patient, temporarily at least.

BIBLIOGRAPHY

1. **Slaughter, Danely P.**; and **Craver, Lloyd:** Hodgkin's disease: Five year survival rate: value of early surgical treatment; notes on four cases of long duration. Am. J. Roentgenology. *47:* 596-606, (April) 1942.
2. **Craver, Lloyd:** Conference on Therapy. Treatment of blood disorders. Reports of the Dept. of Pharm. and Med., Cornell University Medical College and New York Hospital. J.A.M.A. *115:* 297-302, (July 27) 1940.
3. **Meyer, Ovid O.:** Some therapeutic experience with Hodgkin's disease. J.A.M.A. *117:* 595-600, (Aug. 23) 1941.
4. **Desjardin, A. U.:** Roentgen Treatment for Hodgkin's disease. Dis. of Chest. *11:* 565-589 (Nov.-Dec.) 1945.
5. **Stevens, Rollin H.:** Radium Poisoning. Radiology, *39:* 39-47 (July) 1942.
6. **Fitz-Hugh, Thomas, Jr.:** and **Hodes, Philip J.:** Clinical experience with radio-phosphorus in treatment of certain blood dyscrasias. Am.J.M.Sc. *204:* 662-665 (Nov.) 1942.
7. **Low-Beer, B.V.A.**; **Lawrence, John H.**; and **Stone, Robert S.:** Therapeutic use of artificially produced radioactive substances. Radiology. *39:* 573-597 (Nov.) 1942.
8. **Hoster, Herman A.**; **Doan, Charles A.**; and **Schumacher, Marielien:** Studies in Hodgkin's syndrome. J. Lab. & Clin. Med. *30:* 675-677 (Aug.) 1945.
9. **Hemplemann, Louis A., Jr.**; **Reinhard, Edward H.**; **Moore, Carl V.**; **Bierbaum, Olga**; and **Moore, Sherwood:** Hematologic complications of therapy with radioactive phosphorus. J. Lab. & Clin. Med. *29:* 1020-1041, (Oct.) 1944.
10. **Gilman, A.**; and **Philipps, F. S.:** Biological actions and therapeutic applications of the B. chloroethyl amines and sulfides. Science. *103:* 409-415 (April 5) 1946.
11. **Rhoads, C. P.:** Nitrogen mustards in the treatment of neoplastic diseases. J.A.M.A.: *131:* 656-658 (June 22) 1946.
12. **Singher, H. O.**; **Abels, J. C.**; **Craver, L. F.**; and **Rhoads, C. P.:** Clinical effects of aldehyde bisulfites in patients with cancer. Cancer Research. *4:* 444-446 (July) 1944.

EDITORIAL

IS THERE NEED FOR A MEDICAL WOMEN'S ASSOCIATION?

THE RECENT VISIT to Europe produced many new and strengthened many old ideas on opportunities for women in medicine. It was interesting to note that in all countries there are women who do not wish to belong to women's medical associations, and generally the same reason is given; namely, that women should partake of all the things men do without setting themselves apart or in competition with men and consequently there is no need for a separate organization for women. This argument was very well and characteristically met by one of our British colleagues who made the statement that minority groups everywhere and always needed to organize to present their own wishes and needs. It was interesting, on the other hand, that the male colleagues in Europe seemed not only to assume that the meeting of women physicians was natural but expressed most sincerely the feeling that women had a contribution which was desirable to add to medicine and that their point of view could best be formulated and expressed by women meeting in separate conference. This idea, of course, has been presented by psychiatrists for some time; namely, that men and women complement each other and the optimum situation is found when they work in unison. Our organization also has tried to emphasize that primarily scientific meetings can be attended jointly with men in other organizations and should be so attended, but that women physicians need to meet not only as a minority group in order to express their own point of view and defend, if necessary and when necessary, their position, but also to develop their own talents and make their own contributions to medicine along natural feminine thinking and not by a forceful imitation of the male.

There were several other interesting things that came up. One of these was the possibility of exchange of interns and residents. This should be further explored and should be done on a basis which would make the training acceptable to the school of graduation or to the board for which the person is preparing for certification. It would offer an excellent opportunity for more people to become acquainted with other countries.

Another possibility for our organization is to have the benefit of visits and talks to the membership by physicians from other countries, either visiting in or merely passing through a city. A few such speakers have already taken part in our program.

It was also suggested that exchange of case reports and discussions by letter writing might prove stimulating. This is an idea that could be developed by individuals and also by groups with members of one or several countries. An extremely interesting correspondence could be expected and might serve as a beneficial stimulus for colleagues on both sides of the water or on opposite sides of national boundaries.

Other women's organizations, especially the American Association of University Women, have been very generous with scholarships for visiting university people. In many countries the percentage of membership in this organization is largely professional. Medical women are often selected for these fellowships and some expressed disappointment in finding so few medical contacts in our organization of A.A.U.W. Thereby we also have lost valuable contacts. It is important that medical women establish a close co-operation with other women's organizations for exchange of professional women guests or fellows.

H. E. THELANDER, M.D.

(We are thoroughly in accord with the suggestions offered above. In fact, we plan to make them effective through the pages of the JOURNAL OF THE AMERICAN MEDICAL WOMEN'S ASSOCIATION *in co-operation with our International Correspondents. We are looking forward to interesting case reports, such as those from China* *(see page 417)**. We hope also to be informed by our correspondents of contemplated visits to this country by medical women so that we may be able to help them with social and professional contacts during their visits here. These are only a few of the ways in which we plan to make the International Section of the* JOURNAL *of service to all medical women.*—THE EDITORS.)

INTERNATIONAL SECTION

MEDICAL WOMEN'S INTERNATIONAL ASSOCIATION

President: Prof. A. Ch. Ruys
Honthorstaat 50, Amsterdam Z.

Hon. Treasurer: Dr. D. Odlum
56 Wimpole Street, London W. I.

Hon. Secretary: Dr. Montreuil-Straus
75, rue de l'Assomption, Paris (16)

THE FIFTH CONGRESS OF THE MEDICAL WOMEN'S INTERNATIONAL ASSOCIATION

Amsterdam, June 23-30, 1947

THE OFFICIAL OPENING SESSION of the Congress was held on the afternoon of June 24, in the Aula of the Royal Institute for the Indies.

The address of welcome was given by Dr. van den Blink-Roeder, President of the Dutch Medical Women's Association.

Minister of Social Affairs Drees was the principal speaker. He recalled that the M.W.I.A. was formed in 1919, following World War I (as reported in the Journal of the American Medical Women's Association). "This meeting today indicates," he said, "that you are invited not only as doctors, but also as women, from many different countries." He made special mention of the loyalty and courage, shown by the women doctors of the Netherlands during the war, many of whom were in the front ranks of the Resistance Movement. In closing, Mr. Drees expressed the hope that the meeting of women doctors would have a stimulating effect and encourage meet-

The Fifth Congress in Action

ings of other groups. Her Majesty Queen Wilhelmina sent Miss Tellegen as her Personal Representative to the Congress.

Miss Martindale, the out-going President, spoke of the meeting held in September 1946, in London, the first since 1937, and of the part played by women physicians in the war. "The subject of this Congress will be Women Physicians in the Reconstruction following the War. The problems of peace seem to be almost as great as those of war."

Greetings by the Presidents of the member associations followed. Then Dr. Cornelia de Lange, Professor of Pediatrics at the University of Amsterdam, presented a medal commemorating the Battle of Arnheim to the representatives of each country as a token of the gratitude of the Dutch people to their allies in the war.

* * *

The first general session was held the following morning, Miss Martindale presiding.

The Honorary Secretary, Dr. Montreuil-Straus, called the roll, to which 350 delegates, representing 16 different countries, responded. Miss Martindale announced that at the Council meeting held the previous day, Dr. A. Charlotte Ruys, Professor of Microbiology at the University of Amsterdam, had been the unanimous choice of the Council for President. Her election was confirmed by vote of the general assembly, and thereafter she presided. Prof. Ruys said that she was honored by the decision of the Council and of the Assembly to elect her as President, realizing that it was her country and not herself as an individual that had been selected and thus honored. She admitted that previous to the war she had not been especially interested in international affairs, devoting her time to her work, but her experiences during the war had taught her that women have other responsibilities, that participation by them in national and international affairs is very essential. She paid a tribute to Miss Martindale, who served the M.W.I.A. for twenty-two of its twenty-five years, who kept it alive during the war years, and who, in less than two years after the cessation of hostilities, was able to bring together so many delegates from so many different countries.

Dr. Doris Odlum, Honorary Treasurer, in presenting her report stated that at the Council meeting of September, 1946, held in London, it was decided that the membership fee should be one shilling per member, but that any country feeling able to pay the usual fee of two shillings might do so. This action was taken in view of the difficulties of foreign exchange in some countries. It was also decided that dues would begin from January 1, 1947, and that dues of any countries desiring to pay for 1946 as well would be accepted with pleasure. Sweden and the United States sent dues for 1946, Canada sent dues not only for 1946, but for all the war years.

The report of the Honorary Secretary, Dr. Montreuil-Straus, followed, including an account of the London meeting, at which 19 council members and officers representing 16 countries were present. The activities of the Secretary from 1937 to 1946 were published in the Bulletin of the M.W.I.A., issued in December, 1946. The present report covered the period from October, 1946, to June, 1947. These were full months because of preparations for the Fifth Congress and attempts to re-establish relations with those associations, with whom there had been no contact at the London meeting.

Following are the results of these attempts:

1. **Poland.** A reply was received which stated that Dr. Garlicka, former vice-president, and Dr. Zand, N. C. secretary, had been killed by the invaders of their country, as had many others of their colleagues.

2. **Italy.** A request for reinstatement has been made and observers have been sent to the Congress.

3. **U.S.S.R.** No replies have been received to many letters.

4. **Roumania.** No replies have been received to many letters.

5. **Yugoslavia.** After a first contact established after the London meeting no news has been received since the beginning of the year.

6. **India.** No news has been received since October.

7. **Portugal.** The national corresponding secretary of the Portuguese Association has asked that for special reasons her name be removed from the list of national secretaries.

8. **Belgium.** Hopes to be able to form an association.

9. **Switzerland.** Has still only individual members.

Dr. Montreuil-Staus said "We can be proud that in so little time and in spite of the misunderstandings caused by the war, we have been able to get together so many representatives. We can therefore look with confidence to the future; we can believe that the Medical Women's International Association will play an active and effective role in the reconstruction of the post-war world."

The reports of the National Corresponding Secretaries were read.

The election of the officers was the next order of business. The election of Professor Ruys as President had been confirmed earlier in the meeting. The following Vice-Presidents were elected: Dr. Agnete Braestrup, Denmark; Dr. Zaida Eriksson-Lihr, Finland; Dr. P. Gauthier-Villars, France; Dr. Edna Guest, Canada; Dr. Miloshevitch, Poland; Dr. Barbara B. Stimson, United States.

Dr. Doris Odlum was re-elected Honorary Treasurer. The Executive Committee had selected Paris as the place of the Secretariat, and this was confirmed by the general assembly. Dr. Ruys, on proposal of Dr. Montreuil-Straus, was unanimously re-elected Honorary Secretary.

The following resolutions and amendments to the Constitution, referred from the Council, were approved by vote of the General Assembly.

1. An amendment to add the post of Past-President to the Executive Committee. The retiring president will be a member of the Executive Committee for one term (three years) and will have power to vote.

2. A ruling that the number of counsellors to which an association will be entitled will be irrespective of the number of Executive officers, (President; Honorary Treasurer; Honorary Secretary) who may come from that country. It was felt that these officers should be internationally minded in their deliberations and should therefore not be expected to represent any particular country.

3. In case of death or resignation of the Senior officers: President, Honorary Treasurer, Honorary Secretary, a Council meeting will be called to elect a successor.

4. In case of death or resignation of a Vice-President, the Executive Committee will appoint a successor from the same country, after consultation with the association of that country.

* * *

The general meeting was resumed on Saturday afternoon, June 28. Dues were returned to the previous amount, two shillings. Special situations in which the payment of this amount might result in hardship or difficulty because of exchange would be individually considered by the Executive Committee.

It was decided to have a meeting of the Council in July, 1949, in Finland. The invitation to hold the Sixth Congress in 1950 in Philadelphia, as extended by the American Medical Women's Associa-

tion, was accepted, with Paris as an alternative in the event that financial or international conditions might prevent meeting in the U. S. A.

On motion of the Scandinavian delegation, a resolution nominating Dr. Bertha van Hoosen an Honorary Member was passed by the Council and approved by the Assembly.

The collaboration of the M.W.I.A. with other international groups, such as UNESCO, (World Health Association), International Association of University Women, International Council of Women, etc., was discussed. The President was authorized to appoint observers to meetings of such groups and after consideration of the report of the observer and consultation with the Council to approve or disapprove affiliation of the M.W.I.A. with such organizations. Dr. Ruys urged all women physicians to participate in the committee work of the UNESCO.

The International Section of the Journal of the American Medical Women's Association was offered to the International Association for news and announcements in the interval between the publication of the official International Bulletins. This offer was accepted by the Council and Dr. Ruys expressed to the Delegates of the U. S. A. the gratitude of the Executive Committee and of the Council for the use of the International Section.

The following resolution offered by the Committee of Rapporteurs was unanimously voted: "Since in rebuilding the world it is evident that physical and mental health are inseparable from the social, economic, and moral status of people, the women doctors meeting in International Congress in Amsterdam, June, 1947,

Resolve, that as physicians we not only qualify ourselves individually in the best tradition of all branches of our professions, but also participate effectively in those activities which concern themselves with the social, economic, and moral betterment of Society at local, national, and international levels."

With regard to the selection of the subject for discussion at the 1950 Congress, it was decided that the Secretary should list all the suggestions received and send a copy to each national association, which, after being given this opportunity for deliberation, would then return to the secretary their selection of a subject. It was also decided that there should be two subjects for discussion, one to be of a general nature, the other more specific. (Subjects are listed below—Ed.)

The national associations are to return their choice of subjects to the Secretary within six months. The two subjects chosen by the greatest number of associations shall be studied at the next Congress.

(Read and approved by Dr. Montreuil-Straus.)

OFFICIAL BULLETIN

Suggestions for Scientific Discussions at the Next International Congress

DENMARK:

I. Hygiene of the school child.

II. Legislation for the control of venereal disease.

FINLAND:

I. Education of women for marriage and motherhood.

In the difficult life of today, with the role and work of women becoming more and more important, the question of marriage and motherhood seems to be fundamental. Only medical women will be capable of planning and conducting such education. As subjects for discussion, we would suggest:

1. Sex education of young girls in school by school teachers or doctors or teachers specially trained.

2. Premarital advice: psychological, marital relations, home-making, etc.

3. Problems of separation and divorce: psychological, legal matters, etc.

FRANCE:

I. Since housework is practiced in all classes of society, in the town as well as in the country, it should, like any other work, be under medico-social supervision. Bad living conditions and unsatisfactory hygienic conditions of work in the home affect not only the health of the housewife, but also health of the entire family, especially of the children. Many diseases, especially diseases of the osteo-articular and venous systems, seem to be connected with this kind of work and to be exaggerated by it. Therefore, we suggest for discussion at the next Congress, the following subjects:

1. Pathology and hygiene of housework.

Propositions de Questions Scientifiques Pour Mises A L'Etude du Prochain Congres

DANEMARK:

I. Hygiène de l'écolier.

II. Législation anti-vénérienne.

FINLANDE:

Education de la femme en vue du mariage et de la maternité.

Dans la vie difficile actuelle où le rôle et le travail de la femme vont être de plus en plus importants, la question du mariage et de la maternité semble être fondamentale. Seules des femmes médecins expérimentées seront capables de donner une telle éducation. Nous suggérons comme sujet à discuter:

1) Education sexuelle des jeunes filles dans les écoles par:
   a) les institutrices.
   b) des médecins ou professeurs spécialisés dans ces questions.
2) Conseils en vue du mariage:
   a) Conseils psychologiques.
   b) Conseils sexuels.
   c) Conseils d'habitations et autres.
3) Problèmes de séparations et divorces:
   a) Psychologiques.
   b) Pénaux.
   c) Autres.

FRANCE:

I. Considérant que le travail ménager pratiqué dans toutes les classes de la société à la ville comme à la campagne, doit être protégé comme tout autre travail par une surveillance médicoèsociale,

Que les mauvaises conditions matérielles et l'hygiène défectueuse du travail ménager affecte non seulement la santé de la ménagère mais par contre-coup celle de toute la famille et spécialement des enfants,

Que beaucoup d'affections, notemment les affections

2. Organization of the home from the point of view of the houseworker and of hygiene. (Dr. Montreuil-Straus.)

II. The national organization of social insurance (or social security): Programs; accomplishments; effect on (a) the practice of medicine; (b) the protection of public health.

III. Since medical women play an important part among the native inhabitants of a country, and since these natives highly appreciate the new ideas of medical women in the practice of their profession; and considering the devotion and gratitude of the natives for the work of physicians in general and women physicians in particular, and the difficulties of solving the problems of colonization so as to secure a better life and greater justice for the natives: We propose that the question of the constructive and humanitarian role of medical women in the colonies should be made the order of the day in the next Congress.

HOLLAND:

I. Anemia in women, its causes, the influence of food habits, famine, pregnancy, dress, sports, etc.

II. Irreparable post-war injury to children born in the years 1935-45. Can the traces of such injury, physical or mental, be recognized in these chidlren who represent the future?

III. Psychosomatic medicine, a new branch of scientific medicine.

We have chosen the first two subjects since the International Association can give us an opportunity to secure statistics necessary to scientific research and difficult to obtain otherwise. The subject discussed this year was not entirely satisfactory to us, as it was not of sufficiently scientific character.

The third subject suggested would be interesting from another point of view because it would stimulate discussions.

HUNGARY:

I. Influence of collective education: creches, day nurseries, youth organizations, on individual and family life, from the medical, moral, and social viewpoint.

II. A program for effective school hygiene.

NORWAY:

I. Protection of childhood.

NEW ZEALAND:

I. Comparison of various health services in different countries, with reference to the progress of curatie and preventive medicine.

UNITED STATES:

I. National cancer control program.

II. Survey of modern concepts of psychoanalytic therapy.

III. National and international programs of child hygiene, physical, mental, emotional.

IV. Correlation of endocrine and nervous systems in functional and mental disturbances.

ostéo-articulaires et veineuses paraissent liés à ce travail et sont certainement entretenues par lui,

Nous proposons pour être mis à l'étude du prochain Congrès le sujet suivant:

1) Pathologie et hygiène du travail ménager.

2) Organisation rationnelle de l'habitation au point de vue du travail ménager et de son hygiène. (Dr. Montreuil-Straus.)

II. Les organisations nationales d'assurances sociales (ou de sécurité sociale). Programmes—Réalisations—Conséquences pour: a) l'exercice de la médecine; b) la protection de la santé publique. (Mme. Thuillier-Landry).

III. Considérant le rôle important d'une femme médecin auprès des indigènes,

Considérant que ces deniers apprécient énormément l'apostolat des femmes médecins dans l'exercice de leur profession. Considérant l'attachment et la reconnaissance des indigènes pour l'oeuvre médicale des médecins en général et des femmes médecins en particulier, Considérant les difficultés de résoudre la question coloniale pour plus de bien et plus de justice pour les autochtones, nous proposons que la question du rôle constructif et humanitaire des femmes médecins dans les pays de colonisation soit mis à l'ordre du jour du prochain Congrés (Mme. Delanoë).

HOLLANDE:

I. Anémie chez les femmes—ses causes—influence de l'alimentation, famine, grossesse, coutumes vestimentaires, sports, etc.)

II. Dommages irréparables rostérieurs à la guerre causés aux enfants nés durant les annés 1935-45. Est-ce que des traces de ces dommages peuvent être retrouvés au point de vue moral et physique, ces enfants représentant l'avenir.

III. Médecine psycho-somatique, nouvelle branche de la science médicale.

Nous avons choisi les deux premières questions considérant que l' Association Internationale peut nous donner une possibilité de travail statistique nécessaire à ces recherches scientifiques et difficiles à obtenir autrement. Le sujet discuté cette année ne nous a pas entièrement satisfaites, n'ayant pas un caractère suffisam ment scientifique. La troisième question serait intéressante à un autre point de vue, car elle susciterait d'intéressantes discussions.

HONGRIE:

I. Influence de l'éducation collective: crèches, garderies d'enfants, organisation de jeunesse, sur l'individu et la vie familiale du point de vue médical, moral et social.

II. Programme effectif d'hygiène dans les écoles.

NORVEGE:

Protection de l'enfance.

NOUVELLE-ZELANDE:

Comparaison entre les divers services d'hygiène fonctionnant dans différents pays en rapport avec les progrès de la médecine curative et préventive.

ETATS-UNIS:

I. Programme national anti-cancéreux.

II. Conceptions modernes de la thérapeutique psychoanalytique.

III. Programme national et international concernant l'hygiène de l'enfant (physique, moral et psychique).

IV. Corrélation du système endocrinien et nerveux dans les maladies fonctionneles et mentales.

SOCIAL ACTIVITIES DURING THE FIFTH CONGRESS OF THE MEDICAL WOMEN'S INTERNATIONAL ASSOCIATION

Amsterdam—June, 1947

This Congress will be long remembered as a very happy event, made so by the cordial and friendly hospitality of our Dutch colleagues. Delegates began arriving early, but whether we came by plane, train, or steamer, we were each one of us met by medical students from the University, who expedited our trip to the homes or hotels to which we had been assigned, and who took over our registration with the police, the customary formality necessary for foreigners.

Amsterdam is a beautiful city—and spotless! Its canals appear to wander in and out in a maze, but actually there is a definite pattern, as more and then more land was reclaimed from the sea for the increasing needs of the city. Flowers bloom everywhere—in gardens and window boxes. It is difficult to believe that this city suffered any damage by bombing, everything now is so orderly and well-groomed. But occasionally the shell of a bombed house stands out against this peaceful background as a vivid reminder of desperate days.

The Indisch Institut (The Royal Institute for the Indies) was the center of activities and the seat of the general meetings. Here on the first day, following the official opening, tea was served by the Netherlands' Medical Women's Association, and the delegates, each wearing a badge with her name imprinted, became acquainted with one another. That evening we were invited to an organ concert offered by the Holland Section of the International Society for Contemporary Music, and given in the Lutheran Church with Herman Nieland as organist.

Luncheon on the second and third days was provided at the Indisch Institut between forenoon and afternoon meetings. On the evening of the second day a formal dinner was held at the Victoria Hotel. The dinner began formally; talks, short and gracious, were given by spokesmen for the various delegations and a standing toast was drunk to Her Majesty Queen Wilhelmina, who had honored the Congress with her patronage. Tribute was paid to Miss Martindale, the retiring president, for her success in preserving the organization during the war years. The tribute was accompanied by a beautiful bouquet of delphiniums which quite concealed Miss Martindale from view. Formality gradually disappeared and at the close of the evening the delegates were singing their national anthems and, finally, Auld Lang Syne.

(Is there not some one among our members who could write us a theme song on an International level? We would have liked to end our evening in that way.—A.C.R.)

The following afternoon we were taken on a boating-trip through the Amsterdam canals and harbor as guests of the Municipality. This was a lovely and interesting trip. We sailed along the canals, past charming homes and historic buildings, past

barges loaded with flowers so that they appeared to be floating gardens, past the home for old ladies and old gentlemen, who sat placidly on their terrace and waved to us as we went by, then out to the harbor where we saw ships from many corners of the globe.

In the evening a reception was given by the Municipality of Amsterdam in the Municipal (Stedelijk) Museum, where we were graciously greeted by His Honor Mayor d'Ailly, wearing his badge of office, and a member of the Municipal Council, Mr. Schokking. We enjoyed coffee and cakes while meeting these distinguished citizens and admired the van Gogh and other paintings in neighboring salons. On the ground floor, an eighteenth century apothecary shop and a room removed from an insane asylum of the same era were also on display. The labels on the old Delft herb jars are now obsolete and the quantities handled were tremendous, but the beauty of the china and brass still remains. The cage-like crib and the steel restraints are a far cry from the shock therapy of today!

On Friday we had an all day excursion to The Hague and to Leyden. In eight buses filled with delegates we rode past countless acres of vegetables growing in orderly rows, fields of grain, and herds of grazing cattle, with windmills in the background. Our first stop in The Hague was at the Peace Palace, now being used as the United Nations Court of Justice; then to the Museum Mauritshuis to view an unusual collection of old masterpieces by Rubens, Van Dyck, Murillo, and others of the fifteenth and sixteenth centuries. Rembrandt's "Lesson in Anatomy" was of both pictorial and professional interest. After luncheon at the Chateau Ond-Wassenaar, which was occupied by Seyss-Inquart during the war, we resumed the journey to Leyden, where we were received by the Rector in the Grand Aula of the University. This gentleman was one of the outstanding members of the Resistance Movement and during the occupation refused to turn Leyden into a Nazi institution. For this he was interned and his best friend and colleague died. The Rector outlined the history of the founding of this, the oldest University in Holland, in the sixteenth century, and its resistance to oppression in all the troubled times Holland has had to endure. Tea was served by students in the beautiful rooms and gardens of the university. Some of us walked around in the winding streets of the old town, finally arriving at Saint Peter's Church. During the early days of the Calvinistic influence all churches were whitewashed. Gradually this is being removed and in the Leyden cathedral beautiful murals are coming into view again after hundreds of years.

Saturday was taken up by the Council meeting, hospital visits, and the final session of the Congress. At noon, on the invitation of the Rijks museum, we were conducted privately to a large salon which is being re-conditioned for public exhibition. At one end was the famous "Night Watch", the group picture by Rembrandt van Rijn, representing the city militia. This valuable painting was hidden during the war. Despite a storm of protest it was recently cleaned and the soot and amber varnish were removed. Now one can see that it is not a night scene, but that the sun is shining. The lieutenant's yellow suit is now cream colored! We were glad to have the privilege of seeing this masterpiece again.

Saturday evening the whole city of Amsterdam played host to its medical visitors. Concerts and receptions were held in beautiful private homes and clubs on the wide canals. Our hosts were gracious to an extreme, offering us tea, wines, and punches, and delicious things to eat. It was hard to remember that we were in a country still limited by rationing. But of good music and generosity there can never be enough and we were also grateful for a glimpse of home life in this fascinating city.

On Sunday we took a long trip into the country, visiting the National Park, the "Hooge Veluwe", after driving through miles of scrubby heather. A visit to the Museum afforded the opportunity to view the van Goghs and other semi-modern artists represented magnificently in many Dutch collections. We visited the cemetery where rest so many Allied soldiers of airborne divisions. We were grateful for the good and kindly care of the graves of our countrymen and added our flowers to those already blooming in abundance. After lunch at the castle we returned to Amsterdam.

Monday was spent in meetings, hospital visits, and shopping. In the evening we went to the Municipal Theater (Stats schonberg) where we were transported to Spain by Mme. Charlotte Kohler through her recital in English of the story of "Frasquita." Miss Martindale, representing the International Medical Women's Association, thanked the people of Amsterdam for their magnificent help in entertaining the delegates and Dr. Vander Blink-Rolder also thanked them for responding to the request of the Dutch medical women that they act as hosts. Flowers were presented to Mme. Kohler, who is a great artist and able alone to maintain the attention of a large audience through a whole gala evening.

On Tuesday the Organon factories took a large group to Oss in the southeastern section of the Netherlands. En route we had occasion to observe more of the devastation suffered because of the battle which was fought at Nijmegen. We enjoyed going through the beautiful factories and can well see why the Organon industry has won such a good name for its products.

While reading of the many social activities of the Congress and the many receptions and entertainments offered us, one is apt to think of it as a Cook's tour. Actually it represented a composite picture of hundreds of new friendships among the delegates of all the countries. One observed constantly the exchange of cards and the parting handshake accompanied by "when you come to my city be sure to let me know and I'll meet you." Of such stuff is international friendship made.

ADA CHREE REID, M.D.
MARGARET S. TENBRINCK, M.D.

INTERNATIONAL NEWS

An international conference, organized by the National Association of Maternity and Child Welfare Centers and for the Prevention of Infant Mortality was held in June, 1947 in London. Delegates from 23 countries were present. The first day's meeting was opened by Dr. Jane H. Turnbull, chairman of the Association. The discussion of the outlook in Europe was opened by Dr. Emilie Lukasova, Czechoslovakia. It was suggested by Dr. C. O. S. Blythe Brooke that women might well be encouraged to take a greater part in the management of child-welfare schemes.

Case Reports from China

Excerpts from a letter just received from Dr. Gladys S. Cunningham of Chengtu, China, reporting work carried on by Chinese women physicians:

CASE I

No. 1 (top photograph) is the picture of a small boy, probably ten years of age, who has kala-azar. The dark line sketched on his abdomen shows the outline of his spleen. He is standing in that hunched position because he is on a stool, holding to the foot of his bed, to get a light from the window, and he has a sore foot which he was saving. His rather expressionless face and huge abdomen are typical of such patients. Kala-azar is not endemic in this province as it is in the north, but this lad went for a short time into the Tribes' Country—up in the hills west of here—where there is an endemic area, and contracted it there. This type is the type of case with which Dr. Ruth Dsang has to cope in her pediatrics ward.

CASE II

No. 2 (middle photograph) shows Dr. Ho Chuen-Yin, who will shortly succeed to the position of resident in the Department of Obstetrics and Gynecology, now occupied by Dr. Shih Jen-Lan, who is on the A. W. H. payroll. In this picture she is shown just finishing the inspection of an eight pound baby girl which she removed by cesarean section from the uterus of a young woman with contracted pelvis.

CASE III

No. 3 (bottom photograph) shows Dr. Shih Jen-Lan examining a woman with a large ovarian cyst, on whom she and Dr. Helen Yoh operated just after the picture was taken . . . The tumor weighed 40 pounds, and was partly solid and partly fluid. It appeared to be of the pseudo-mucinous type, but the pathological report is not yet back. The operation was difficult, as there was a lot of trouble with adhesions. The first postoperative day was hard for the patient, because of gastric distention, which yielded to Wagensteen drainage. She is doing well.

ORGANIZATION

Official Reports and Announcements of the Association

MID YEAR BOARD MEETING
Netherland Plaza Hotel, Cincinnati, Ohio
December 6-7, 1947

PRESIDENT'S MESSAGE

DUTY PRESSES. Days are full. Cost of living rises. Community interests urge attention. Why spend time promoting the American Medical Women's Association?

Our time must be given only to those causes that require support for vital reasons.

Is there anything vital in our existence? Our answer is "Yes," for the following brief reasons:

First, we are a minority in the field of medicine. A minority needs to be organized if it is to exert any influence on the whole, and time has proven that often safety is assured only by the firm stand of a minority. I leave you space here to fill in examples that come to your mind to illustrate this point.

Second, needy fields still exist in which we have an intrinsic interest. The first woman studied medicine with a humanitarian ideal as her lodestar. Women are still on the alert to improve the health and social groundwork of children and women. Maternal and infant welfare, cancer control, marital security and a sane psychology of living, these may be mentioned as medical fields in which we as an organized group may be especially useful. Our achievements in these areas in the past have justified our existence and the demand is still strong upon us. There is still need to offer the hand of organized encouragement to young women who are hoping to enter the profession.

Third, for friendship. We can not discount the bonds of friendship that develop as we work together. Volumes have been written on the necessity of cultivating friends and all who have served in responsible places have felt the thrill of contacts with other strong personalities who are interested in the unselfish purposes to which we give our devotion.

We invite you to participate in the program of the American Medical Women's Association as it appears during the year, and verify the warmth of friendship which can be experienced by working together for the humanitarian causes in which we are interested.

Mabel E. Gardner

NEW ACTIVE MEMBERS

ILLINOIS

Helen Vincent McLean, M.D.—664 North Michigan Avenue, Chicago 11. M.D., Johns Hopkins, 1921. Member of AMA, County Medical, Amer. Psychiatric Assoc., Amer. Psychoanalytic Assoc., Institute of Medicine Chicago, Chicago Psychoanalytic Society; Ill. Psychiatric Assoc., Amer. Orthopsychiatric Assoc. Specialty: Psychiatry & Psychoanalysis. Endorsed by Drs. Joan Fleming, Charlotte Babcock.

Lydia C. Marshak, M.D.—4743 S. Ingleside Ave., Chicago 15. M.D., Prague, Czechoslovakia, 1928. Member of AMA, County Medical. Specialty: General Practitioner and Syphilologist. Endorsed by Drs. Evangeline E. Stenhouse, Marguerite G. Oliver.

MINNESOTA

Carrie Ethelyn Chapman, M.D.—Mayo Clinic, Rochester, Minn., M.D., Tufts College Medical School, 1934. Member of AMA. Specialty: Anesthesiology and Physical Medicine. Endorsed by Drs. Della G. Drips, Lois A. Day.

NEW JERSEY

Marie E. Russell, M.D.—583 Haddon Ave., Collingswood, N. J., M.D., Woman's Medical College, 1944. Member of AMA, County Medical. Specialty: Pediatrics. Endorsed by Drs. Dorothy M. Rogers, Helen F. Schrack.

NEW YORK

Louise M. Dantuono, M.D.—56-40 136 St., Flushing, N. Y., M.D., Woman's Medical College of Pa., 1942. Member of AMA, County Medical. Specialty: Obstetrics and Gynecology. Endorsed by Drs. Georgia Reid, Sophie J. Kleegman.

Cora Morris Ehrenclow, M.D.—925 Park Ave., New York 28. M.D., Cornell, 1920. Member of AMA, County Medical. Specialty: Psychiatry. Endorsed by Drs. Elaine P. Ralli, Georgia Reid.

Louise R. Gowanloch, M.D.—235 E. 73 St., New York 21. M.D., Rush, 1928. Member of AMA, County Medical. Endorsed by Drs. Leoni N. Claman, Elaine P. Ralli.

Hildegard Hirsch, M.D.—181 N. Main St., Geneva, M.D., University Pisa, Italy, 1937. Member of AMA, County Medical, State Medical Society. Specialty: Women and children. Endorsed by Drs. Bertha Van Hoosen, Mabel Gardner.

Alice E. Moore, M.D.—206 E. 26th St., New York 10. M.D., New York University, 1942. Member of County Medical. Specialty: Internal Medicine. Endorsed by Dr. Elaine P. Ralli, Leoni Claman.

PUERTO RICO

Dra. Dolores M. Pinero, Rio Piedros.

Dra. Susana I. de Ramirez, 20 Betances St., Aguadilla.

Dra. Isabel V. Estrada, Box 5131, Puerto de Tierra.

Dra. Ana Janer, Rio Piedros.

Dra. Blanca A. Lhiberes, Loiza No. 1502, Santurce.

Dra. Maria A. Pares, No. 208 San Jorge St., Santurce.

Dra. Alice V. Reinhardt-Valcourt, Sanatorio Insular, Rio Piedros.

Dra. Dharma L. Vargas, Ave Gonzalez No. 1106, Rio Piedros.

NEW ASSOCIATE MEMBERS

E. B. Nix, M.D.—Charity Hospital, New Orleans. M.D., Louisiana State University, 1939. Fellow, AMA. Specialty: Pathology. Endorsed by Drs. Lucy S. Hill and Elizabeth Bass.

Esther K. Yiu, M.D.—Alexander Blain Hospital, Detroit 7, Michigan. M.D., Lingnan University, China, 1939. Member of County Medical. Specialty: Eye, Ear, Nose and Throat.

BLACKWELL SEALS

At the annual meeting of the American Medical Women's Association, held at San Francisco in June, 1946, a committee was appointed to address a petition to Congress for a Federal stamp in honor of Elizabeth Blackwell. This stamp would constitute a celebration of her graduation in medicine in 1849—the first woman in the world to be given an M.D. degree. Up to date no woman doctor has ever enjoyed Federal stamp recognition. The first woman to be so publicized was Queen Isabella of Spain, during the Columbian Exposition in Chicago, and the stamp appeared in three issues. The lovely, capped head of Martha Washington was first used on a Federal stamp in 1901 and again in 1937.

The work of the Red Cross was nationally acknowledged by the "Greatest Mother" stamp, a mother with her arms encircling the world. To honor the mothers of America, the famous painting of Whistler's mother was reproduced on a Federal stamp.

In 1936, the suffrage movement was favored by a stamp depicting Susan B. Anthony; and in 1937, Virginia Dare, the first white woman born in America, on August 18, 1557, was stamped into history.

In the "Famous Americans" issue of 1939, the Federal stamp of that year delineated the much-loved author, Louisa May Alcott. In 1940, also in the "Famous Americans" issue, Frances Willard was chosen as educator and Jane Addams as scientist.

As premiere to a Federal stamp recommendation for Elizabeth Blackwell, as well as for the purpose of raising funds for a Blackwell Memorial, the Committee of the Medical Women's Library and Memorial Building Fund have issued Blackwell seals and a Blackwell envelope. The seals portray Elizabeth Blackwell at the time of her greatest activity and charm. Her smiling face looks out from a frame on which are the words "Blackwell Memorial, Nov. 7, '47." The envelopes are decorated with an amusing scene of the first woman student entering medical school, Elizabeth Blackwell's first day. The Campaign Committee has designated November 7, 1947, as Blackwell Day, and are prepared to mail to any member of the A.M.W.A. as many envelopes as she desires with enclosures of Blackwell Seals, form letters asking for contributions, pledges, and a return envelope addressed to Dr. Carroll L. Birch, Treasurer.

It is hoped that a wide distribution of Blackwell Seals will promote the raising of funds for the Blackwell Memorial, and of equal importance, will help to acquaint the general public with Dr. Blackwell's greatness entitling her to recognition on a Federal stamp. The idea must never be fostered that it was a happenstance, a flirt of fate, that Elizabeth Blackwell and not some other woman was the first woman M.D. in the world.

One hundred years ago in the 40's women were the slaves of convention. Every avenue of self-expression was blocked. All opportunities for advancement or a career were denied. Burdened with clothes and housewifely duties; ambitions were stifled. Any deviation from what society called "the woman's sphere" was met with disapproval by friends and associates. Such were the times when Elizabeth Blackwell knocked at the door of every medical school before she could find one to accept a woman student. Such were the times when she crossed the Atlantic Ocean and lived like a prisoner in La Maternite in Paris in order to acquire a knowledge of obstetrics. Few nineteenth century ladies would have been willing to have lived in a ward with peasant girls who were studying to become midwives, eaten coarse food, and scrubbed floors, even to catch a husband, the highest aim of the women at that time.

Such were the times when Dr. Blackwell tramped the streets of New York for weeks to find an office where she would be allowed to display a woman doctor's sign. Even without that sine qua non of the practicing physician, she succeeded by putting a card calling attention to her office hours and location in Horace Greeley's New York Tribune. Such were the times when she was obliged to found a medical school and establish a hospital to secure hospital opportunities and medical education for women. They were Herculean tasks magnificently performed by a delicate woman in a strictly feminine manner.

There is only one Elizabeth Blackwell and if she had failed, women in medicine might still be the dream of a future century.

With such a background medical women may justly be proud to sign their names to the form letter of the Blackwell Campaign and send out Blackwell Seals to memorialize the only Elizabeth Blackwell.

BERTHA VAN HOOSEN, M.D.

Chairman of the Committee of the Medical Women's Library and Memorial Building Fund.

BY ALICE BARTLETT
AND CARROLL BIRCH

A Medical C

1 On September 1, 1576, the Venetian representative of the great house of Fugger, bankers to the Hapsburgs, reported to the home office in Augsburg the sale to the Venetian Senate of a secret remedy for Plague for 30,000 ducats monthly.

2 September 2-6, 1666, fire in London, England, covered 436 acres. The fire followed the great plague which killed 68,000 in London and thousands elsewhere in England. Fires kept burning to kill the vapours of the pestilence were blamed for the Great Conflagration.

3 On September 3, 1821, the first patient was admitted to the Massachusetts General Hospital. Dr. John C. Warren was the first surgeon and James Jackson the first physician.

4 Elihu Hubbard Smith was born in Litchfield, Connecticut, September 4, 1771. In 1796, co-operating with Samuel L. Mitchell and Edward Miller, he founded the *Medical Repository*, the first American medical journal.

5 Dr. Thomas Bond's interest in the promotion of the Pennsylvania Hospital is evident from the minutes of the Managers on September 5, 1751: "The President and Thomas Bond are requested to consider some of the methods to begin the hospital in a private house so as to accommodate a few patients in order that at least some good might be doing in the meantime until the hospital is built."

6 James Wharton McLaughlin was born September 6, 1840. He was the discoverer of the bacillus of dengue.

It is generally understood that Catherine II of Russia introduced inoculation at the suggestion of Voltaire, who was an ardent supporter of the practice. This may be so, but the first reference to inoculation in their correspondence is a letter from Catherine to Voltaire dated September 6-17, in which she tells him of inoculation by Dimsdale.

7 Stephen Hales was born in England, September 7, 1677. His first important publication was "Vegetable Staticks or Experiments on the Sap of Vegetables," which may be regarded as a starting point in our true knowledge of vegetable physiology. Another work concerned the circulation of the blood. He invented machines for distilling sea water, preserving meat, etc.

8 On September 8, 1842, James Syme performed his first successful case of amputation at the ankle joint.

9 On September 9, 1840, Dr. John Homer Dix performed one of the first operations in America for congenital strabismus (Dieffenbach operation), reporting his results in a brief letter to the *Boston Medical and Surgical Journal*, September 24, 1840.

10 The first epidemic of Typhus Fever in Halifax was in 1746, before the settlement of the town. A fleet arrived at Chebucto, Acadia, on September 10, having lost between 1200 to 1300 men at sea, and while encamped 1130 more died of scorbutic fever with dysentery, diagnosed as Typhus Fever.

11 The first medical cartoon published in the United States was in *Harpers Weekly*, September 11, 1858.

12 St. Vitus, a Sicilian, was martyred on September 12 in the Fourth Century, under Diocletian, in spite of the legend that he had cured Diocletian's son of devil possession. Epidemic outbursts of mental and physical excitement called "dancing mania" occurred in the Middle Ages, especially in Germany, and resort for a cure was made to the shrine of St. Vitus. St. Vitus' dance, or Chorea, epilepsy, and devil possession were equally confused in that period.

Dr. Alice Stone Woolley, 28th President of the American Medical Women's Association (1944-1945), was born September 12, 1882.

13 The discovery of the dysentery bacillus as a cause of summer diarrhea of infants in this country was made September 13, 1902.

Birthday Greetings to Dr. Olga Stastny, 14th President of the American Medical Women's Association (1930-1931).

Calendar FOR SEPTEMBER

14 Ivan Petrovich Pavloff of Leningrad was born September 14, 1849. He was known as the most distinguished Russian physiologist. He won the Nobel prize in 1904. He is noted for his work on the physiology of the circulation and digestion.

15 Dr. Carl Koller on September 15, 1884, gave his first report of using cocaine in anesathetizing the cornea and conjunctiva before the German Ophthalmologic Society of Heidelberg.

16 Sir Ronald Ross of England was born on May 13, 1857, and died September 16, 1932. He studied mosquitoes intensively and incriminated the anopheles mosquito as the transmitter of malaria. For this discovery he received the Nobel Prize in 1902.

17 The Association of Military Surgeons of the United States was formed September 17, 1891. Dr. Nicholas Senn was the first president.

On September 17, 1683, Leeuwenhoek gave for the first time accurate figurations of bacterial chains and clumps as well as of spirilla and bacilli.

18 Constantine Samuel Rafinesque was born in Turkey in 1784. He settled permanently in the United States in 1815. His publications include "Medical Flora of the United States" and "Ancient History or Annals of Kentucky." He died in Philadelphia September 18, 1842.

The Berkshire Medical Institution of Pittsfield, Massachusetts, began its existence September 18, 1823.

19 The first outbreak of sweating sickness occurred in London September 19, 1485.

A Medical school was formed at Cambridge on September 19, 1782.

20 Philipp Biedert of Germany was born November 25, 1847, and died September 20, 1916. He was the first to make a scientific study of infant feeding and the gastrointestinal diseases of infancy.

21 The relation of mosquitoes to the spread of malaria was reported September 21, 1895.

22 Michael Faraday, an English scientist, was born September 22, 1791. In 1847, he discovered the magnetic character of oxygen, and also the magnetic relations of flame and gases.

23 The Royal College of Physicians of London was founded along the lines of the Italian Universities in the reign of Henry VIII on September 23, 1518, as a result of the solicitation of Thomas Linacre, physician to Henry VIII, a medical graduate of Padua, and upon the advice of Cardinal Wolsey.

24 On September 24, 1910, M. S. Kakels first reported the results of the use of salvarsan in the treatment of lues in America.

25 The Hartford Medical Society was organized September 25, 1792.

The American Medical Association was incorporated in Illinois, September 25, 1897.

26 On September 26, 1772, an Act was passed to Regulate the Practice of Physic and Surgery within the Colony of New Jersey.

27 The first all-Russian Ophthalmological Congress was held at Moscow, September 27-30, 1926.

Birthday Greetings to Dr. Emily Dunning Barringer, 25th President of the American Medical Women's Association (1941-1942).

28 Richard Bright, an English physician was born in Bristol, September 28, 1789. His name is associated with Bright's Disease, for he was the first to describe that condition.

29 Michael Servetes of Navarre, Spain, was born September 29, 1511. He discovered the pulmonary circulation.

30 On September 30, 1747, John Huxham published "A Method for preserving the Health of Seamen in Long Voyages" with "An Essay on Fever."

BOOK REVIEWS

(EDITOR'S NOTE:—*These reviews represent the individual opinions of the reviewers and not necessarily those of the members of the Editorial Board of this* JOURNAL).

ULCER OF THE STOMACH, DUODENUM, AND JEJUNUM. By Ralph C. Brown, M.D., Professor of Medicine, University of Illinois, College of Medicine; Attending Physician, Presbyterian Hospital, Chicago. Edited by Henry A. Christian, M.D., LL.D., Sc.D. 105 pp. Illustrations. $2.25. Oxford University Press, New York, 1946.

This monograph covers the subject of peptic ulcer in all its aspects. The sections on etiology and pathology are of special interest. In the discussion of treatment, the reviewer receives the impression that the author believes alkalis and milk produce the best therapeutic effect. The alkalis are limited according to their acid-neutralizing power. Indications for surgical treatment are discussed and various operative procedures outlined. Careful consideration is given to the complications which may arise and to their treatment.

Though the psychosomatic problems of this illness are discussed, they are not unduly stressed. The author thinks that recurrence is best prevented by hygienic living and by shielding the nervous system from undue strain, but that even with these measures recurrence is frequent. The many problems that arise in the management of patients with peptic ulcer have been carefully considered.

This text makes available in a small volume the information presented in the Oxford Loose-leaf Medicine.

—Zohora Ismail, M.D.

TECHNIQUES AND PROCEDURES OF ANESTHESIA. By John Adriani, M.D. 418 pp. Illustrated. $6.00. Charles C. Thomas, Publisher, Springfield, Illinois. 1947.

A vast amount of material is compressed within this small book, an effort having been made to dwell on principles at the expense of details. The author stresses the fact that there can be no such thing as "routine" in the administration of anesthesia. Thoughtful individualization is required, for each case is a problem in itself. The accepted techniques and procedures of all types of anesthesia are discussed and arranged in a clear, logical, and concise manner, free from superfluous verbiage. This anesthesia text covers the simple principles of physiology, pharmacology, chemistry, and physics, on which the sound practices of anesthesiology are based; it discusses technical procedures necessary to apply these principles effectively; it stresses the pharmacological effect of drugs upon the patient and their judicious and skilled use.

Amplifying the text matter are well executed drawings and photographs. The text is divided into seven parts: I. General considerations; types of anesthesia; general duties of the anesthetist; selection of anesthesia; preliminary evaluation and preparation of patient for elective surgery; technique of premedication; anesthesia records. II. Inhalation anesthesia. III. Anesthesia by intravascular injection. IV. Rectal anesthesia. V. Regional anesthesia (spinal, epidural paravertebral block anesthesia, nerve block, Field block). VI. Resuscitation. VII. Inhalation therapy.

This book will certainly prove a sound practical guide to teachers and students and a valuable addition to the library of every one interested in anesthesia.

—Balbina Bregman, M.D.

MODERN DERMATOLOGY AND SYPHILOLOGY. By Samuel William Becker, M.D., and M. E. Obermayer, M.D. 2nd edition. $18.00. 1017 pp. 461 illustrations, 37 colored plates. J. B. Lippincott Company, Philadelphia. 1947.

This is a very readable and comprehensive volume with an excellent index. The chapter on urticaria is well written and the opinions well taken. The same holds for the different forms of acne and the evaluation of its therapy and its management. The book contains a good chapter on industrial dermatoses as well as a list of procedures for skin testing and the necessary solution percentages. Tropical dermatoses are also covered. The material on syphilis is long and complete, but the reviewer would have preferred that the authors had not included the table with rest as part of the treatment schedule, inasmuch as this is no longer generally accepted. On the whole, the book is a good addition to the library of the general practitioner as well as of the dermatologist.

—Else A. Barthel, M.D.

PRINCIPLES AND PRACTICE OF OBSTETRICS. By Joseph B. DeLee, M.D., Late Professor of Obstetrics and Gynecology, the University of Chicago; Consultant in Obstetrics, the Chicago Lying-In Hospital and Dispensary; and J. P. Greenhill, M.D., Attending Obstetrician and Gynecologist, the Michael Reese Hospital; Obstetrician and Gynecologist, Associate Staff, the Chicago Lying-In Hospital; Chairman, Dept. of Gynecology, Cook County Hospital; Professor of Gynecology, Cook County Graduate School of Medicine. 9th edition. 1011 pages; 1108 illustrations on 860 figures, 211 in color. Philadelphia and London; W. B. Saunders Company, 1947. Price $10.00

This revision of DeLee's "Principles and Practice of Obstetrics" by Dr. Greenhill has many changes. The newer form of presentation, with a double column on each page and an excellent type, facilitates reading. The illustrations have been brought up to date, with the addition of many other detailed photographs and sketches. The text is logical in its sequence. The section on anesthesia is short and concise, and includes all types of anesthesia used in the practice of obstetrics.

The chapter on the physiology and management of the third stage is brief, but serves to emphasize the importance of this often neglected phase of the delivery, and is rather well followed up by a chapter on the pathology of the third stage. The abnormalities, encountered during the prenatal and post partum periods, are amply covered.

—Irja E. Widenius, M.D.

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